

<110> Birse et al.

<120> 25 Human Prostate and Prostate Cancer Associated Proteins

<130> PA002P1

<140> unassigned

<141> 2002-01-07

<150> PCT/US00/19666

<151> 2000-07-20

<150> 60/144,972

<151> 1999-07-21

<150> 60/148,681

<151> 1999-08-13

<150> 60/149,173

<151> 1999-08-17

<150> 60/158,004

<151> 1999-10-06

<150> 60/194,689

<151> 2000-04-05

<160> 157

<170> PatentIn Ver. 2.0

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<211> 733

<212> DNA

<213> Homo sapiens

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ccacgcctcc	cgtgctggac	tccgaecgct	ccttcttctt	ctacagcaag	ctcaccgtgg	600
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<210> 2

<211> 5

<212> PRT

<213> Homo sapiens

<220>

<221> Site

<222> (3)

<223> Xaa equals any of the twenty naturally occurring L-amino acids

<400> 2

Trp Ser Xaa Trp Ser

1

5

<210> 3

<211> 86
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> Primer_Bind
 <223> Synthetic sequence with 4 tandem copies of the GAS binding site found in the IRF1 promoter (Rothman et al., Immunity 1:457-468 (1994)), 18 nucleotides complementary to the SV40 early promoter, and a Xho I restriction site.

<400> 3
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 cccgaaatat ctgcatctc aattag 86

<210> 4
 <211> 27
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> Primer_Bind
 <223> Synthetic sequence complementary to the SV40 promoter; includes a Hind III restriction site.

<400> 4
 gcggcaagct ttttgcaaag ctaggct 27

<210> 5
 <211> 271
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> Protein_Bind
 <223> Synthetic promoter for use in biological assays; includes GAS binding sites found in the IRF1 promoter (Rothman et al., Immunity 1:457-468 (1994)).

<400> 5
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 aaatatctgc catctcaatt agtcagcaac catagtcccc cccctaactc cgcccatccc 120
 gccctaaact ccgccagtt ccgcccatc tcgccccat ggctgactaa tttttttat 180
 ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt 240
 ttttgaggc ctaggctttt gcaaaaagct t 271

<210> 6
 <211> 32
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> Primer_Bind
 <223> Synthetic primer complementary to human genomic EGR-1 promoter sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a Xho I restriction site.

<400> 6
 gcgctcgagg gatgacagcg atagaacccc gg 32

<210> 7
 <211> 31
 <212> DNA
 <213> Artificial Sequence

<220>

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<221> Primer_Bind
<223> Synthetic primer complementary to human genomic EGR-1 promoter
sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a
Hind III restriction site.

<400> 7
gcgaagcttc gcgactcccc ggatccgcct c 31

<210> 8
<211> 12
<212> DNA
<213> Homo sapiens

<400> 8
ggggactttc cc 12

<210> 9
<211> 73
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> Synthetic primer with 4 tandem copies of the NF-KB binding site
(GGGGACTTCCCC), 18 nucleotides complementary to the 5' end of the
SV40 early promoter sequence, and a XhoI restriction site.

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ccatctcaat tag 73

<210> 10
<211> 256
<212> DNA
<213> Artificial Sequence

<220>
<221> Protein_Bind
<223> Synthetic promoter for use in biological assays; includes NF-KB
binding sites.

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cagttccgcgc cattctccgc cccatggctg actaattttt ttatttatg cagaggccga 180
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cttttgcaaa aaagctt 256

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<211> 1200
<212> DNA
<213> Homo sapiens

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gacttcattt gtgctaacag tacaacagca gatttgggtc aggcctaatc taagtgttaa 180
cttttttttt tgggtctttt ttggattgat gactgtctca ctttgactat acccatgttt 240
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accaaaagat gtatcatttt tatttgaatc catcatgcag tgcacatttc agataatttc 660
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tcagtgggtct	gactgggttc	attttagaat	taacagctgc	ttcaatatgt	tattcaaatgt	900
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agttatgtgt	gtcatagttg	agcagtagct	ggtagaatta	ggcagttggt	gatagtttta	1020
ctttggatca	aataaaaaat	gtatatctat	atacaataaa	tatatgtcca	tataatgtcca	1080
ccagtataat	ggcattgtctg	tgtctggcac	ttcattgtac	agacttttat	aataaaaaga	1140
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<210> 12

<211> 1106

<212> DNA

<213> Homo sapiens

<400> 12

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ccccagaagg	gtattcaactg	gggattctga	gctttggcta	ctccagtttc	ccacgacacg	180
atgttccctt	tctacagctg	ctggaggact	ggactgctac	tactactcct	ggctgtggga	240
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ggcctgttca	ccagagatct	cccacctcag	tgtgggttcc	atcttacttg	tcacgtgagt	660
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gggtgtacat	aagcacaaat	tgtatgtgta	cattatgctg	taattgatgg	ggataacttt	780
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ccgctgtaac	ccagctctgt	gggaggctga	ggcagtagaa	tcacttgaa	ctggggagggt	1020
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<210> 13

<211> 887

<212> DNA

<213> Homo sapiens

<400> 13

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<210> 14

<211> 1918

<212> DNA

<213> Homo sapiens

<400> 14

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ggcgcccatg	ttgcagcagg	atagtaatga	tgacactgaa	gatgtttcac	tgtttgatgc	180

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<211> 1129

<212> DNA

<213> Homo sapiens

<400> 15

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<212> DNA

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<210> 17
<211> 1098
<212> DNA
<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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 <211> 534
 <212> DNA
 <213> Homo sapiens

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 <212> DNA
 <213> Homo sapiens

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 <223> n equals a,t,g, or c

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<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

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<220>
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<222> (1166)..(1166)
<223> n equals a,t,g, or c

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<220>
<221> misc_feature
<222> (1168)..(1168)
<223> n equals a,t,g, or c

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<220>
<221> misc_feature
<222> (1171)..(1171)
<223> n equals a,t,g, or c

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tcctgtccta gcaaaaaaaa aaaaangng ngg 1173

```

```

<210> 38
<211> 1927
<212> DNA
<213> Homo sapiens

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<400> 38
ccacgcgtcc gggccggact gaggtcttta cagtggctcc tgctggccct tggtagccgg 60
tcgcctcagt tccgaccagg acccgtagcc tgctgctgtg acgtggctcc cggagtagg 120

```

```

gctggcgtagt ggcgcgcatg ttgcagcagg atagtaatga tgacactgaa gatgtttcac 180
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tagcatcggtt ttccactcta tcttttcgag tccagtgcatt catcgctctat ctctctctgtg 300
agttgtctcag cagcagcctt attacctgta tggtgacaat tatctctgttg ttgtctgtg 360
actttttgggc agtgaagaat gtcacaggta gactaatggt tggcctacgt tggtggaatc 420
acatttgatga agatggaaag agccattggg tgtttgaatc tagaaaaggat tctctcaag 480
agaataaaaac tggttcagag gctgaatcaa gaactcttg ctccagagta aagtggttg 540
cagtcattgat ggtgatattt gcttttagtg cactcttctc gtgccaacct gtatggtaca tcaggtgtaa 600
cgggtggttat catgggttg gtaaccagcat ggctaactca tattttggaa agcagttttt 720
ggtgcgcagc agaaaagcatt atcagacttc ctggaatagag aaagcttatg tgcctttgta 780
aagacaaaac actggagatg gattcttgac tcaacctttt agagcttatg ccattgttga 840
cattgggggaa caactgaaag gattcttgac tcaacctttt agagcttatg ccattgttga 840
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tatgttaaat tatgcatttg tattaatggt atttcttaaa gcaattctgt taactgtaaa 1680
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aaaaactttat attttgtataa aattctacta tttaacaggc aaaaaaaaaa aaaaaaaaaa 1920
aaaaaaaaa

```

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<210> 39
<211> 532
<212> DNA
<213> Homo sapiens

```

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<220>
<221> misc_feature
<222> (467)..(467)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (513)..(513)
<223> n equals a,t,g, or c

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<400> 39
ggcagagccc ccacctgcga gagctgatcc tccctaggcc ctgcctaacc ttgagttggc 60
ccccaatccc ttgggtgtgca gaagtcccct taaccccaat gagaggaggg gcaggaccag 120
atctttttag agctgagggt tgagggcatt gagccaacac acagattttg cgccctgtgc 180
cccggaagaca cctgcaccct ccatcgcgrrc caagatgggg aatggaacct aggaagatta 240
taactttgtc ttcaagggtta ctatcgtggt gcagtggggg cctcctgtgt gtttgaccta 300
acaacagccc agacctatgc tgtggtggag cgatggctga aggagctcta tgacctatgt 360
gaagccacga tcgtcgtcat gctcgtgggt aacaaaaatga cctyagccag gccggggaag 420
tgcccatgag gaggcccgaa ttctgttgaa aacaatggat gttttcntga gactcagcct 480
ggatttacca tgttgagtag ctttgagatt tcnagaagaaa ttttgcgagt tt 532

```

```

<210> 40
<211> 1129
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (807)..(807)

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<223> n equals a,t,g, or c

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<400> 40
cagctcgwcc      tctgtcttcc      tacagcacc      ccacctgcc      gagctgatcc      tccctaggcc      60
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gagaggaggg      gcaggaccag      atctttttag      agctgaggg      tggagggcatt      gagccaaac      180
acagatttgt      cgcctctgtc      cccgaagaca      ctgtgacct      ccattggcg      caagatgggg      240
aatggaaact      aggaagatta      taactttgtc      ttcaagggtg      tgctgatcgg      cgaatcaggt      300
gtgggggaaga      ccaattctact      ctccacccgc      acgcgcaatg      agttcagcca      cgacagccgc      360
accacacatg      ggggttaggt      tggcctggag      cggtaaccag      ccatacctc      ggcgtactat      420
gctcagatct      gggacacagc      cctgtgtgtt      gacctaacca      agccaccagc      ctatgtctgt      480
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gtgggttaaca      aaagtgaact      cagccaggcc      cgggaagtgc      ccaatgagga      ggcccgaatg      660
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aacagcactc      ggaccaatgc      catcacntct      ggcagtgcgc      aggtgtccaa      ggagcctggc      840
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ctatcacaaa      tacctctttt      atctgtccac      cctcacaga      ctaggacctc      caataaagc      1080
tgttttatat      caaaaaaaaa      aaaaaaaaa      aaaaaaaaa      aaaaaaaaa      1129

```

<210> 41
 <211> 553
 <212> DNA
 <213> Homo sapiens

```

<400> 41
tctcacccct      cggagacgct      cgccccgac      catagtactt      gccgccagc      cagccccgcg      60
gcgcagccac      catgctaggt      aacaagcgac      tggggctgtc      cggactgacc      tcgcccctgtc      120
cctgctcgtg      tgcttgggtg      cgctggccga      ggcgtaccct      tccaagccgg      accaacccggg      180
cgaggacgca      ccagcggagg      acatggccag      atactactca      gcgctgcgac      atcataccaa      240
cctcatcacc      aggcagagat      atggaaaacg      actagccca      gagacactga      ttacagacct      300
cttgatgaga      gaaagcacag      aaaatgttcc      cagaactcgg      ctgaaagacc      ctgcaatgtg      360
gtgatgggaa      atgagacttg      ctctctggcc      ttttctattt      ttacgcccac      atttctcgt      420
gtaaaacag      aatccaccca      tcttaccatg      gcatgcagcc      actgtgctga      atttctgcaat      480
gttttctctt      gtcactatgt      tatatatgt      tgtttaaata      aagatcatcg      attcaaaaaa      540
aaaaaaaaa      aaa                                553

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<210> 42
 <211> 599
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (583)..(584)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (599)..(599)
 <223> n equals a,t,g, or c

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<400> 42
aattcggcac      gagtctcacc      cctcggagac      gctcgccga      cagcatagta      ctgcccgc      60
agccacgcc      gcgcgccacc      accatgctag      gtaacaagcg      actggggctg      ctcggactga      120
ccctcgccct      gtccctgcct      gtgtgcctgg      gtgcgctggc      cgaggcgtag      cctccragc      180
cgacaaccc      gggcgaggag      gcaccagsgg      agggacatgg      ccagatacta      ctcrgcgctg      240
cgacactaca      tcaacctcat      caccaggcag      agatatggaa      aacgatcyag      cccagagaca      300
ctgatttcag      acctcttgat      gagagaaagc      acagaaaatg      ttcccagaac      tcggcttgaa      360
gcacctgcaa      tgttgtgatg      ggaatgaga      ctgtctctct      ggccctttcc      ttcttcaagc      420
ccatatttca      tcgtgttaaa      cgagaatcca      cccatcctac      caatgcatgc      agccaactgtg      480
ctgaattctg      caatgttttc      ctttgtcatc      attgtatata      ttgtgtttta      aatcaagat      540
catgcattca      aaaaaaaaa      aaaaaa      aaaaaaaaa      acnngggggg      gggcccgcn      599

```

<210> 43
 <211> 1077
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (523)..(523)
 <223> n equals a,t,g, or c

<400> 43					
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tgtccacgg	cgcttctccc	agttgtgat	gaccatggc	gtgctagagg	aatgggacgt
gaagcgcttg	cagacgcact	gctacaaggt	ccatgaccgc	aatgccaccg	tagataaagt
ggaggacttc	atcaacaaca	ttaacagtg	cttggagtc	ttgtatatgt	agataaaagag
aggagtccag	gaagatgatg	ggagacccat	ttatgcgttg	gtgaattctg	ctacaacttc
aaatttccaa	atgtgtcagg	attttgcaga	gaatgaactg	gatttgttta	gaaaggctct
ggaactgatt	atgtactcag	aaaccggctt	tgctgtctcc	acaaacatat	tgaacctggg
tgatacaact	aaaggccaag	agatgaggaa	gaagggaagc	gancagggtc	tgcagaagtt
tgttcaaaac	aagtggctga	ttgagaagga	aggggagttc	accctgcacg	gccggggccat
ccctggagatg	garcaatata	tccgggagac	gtaccgccac	gcggtgaaga	tttccaatatt
ctgtcacacg	ctctctatcc	agggtcaaa	ctgcgaaaac	tgtgggatac	ggatgcactt
accctgcgtg	gccaaagtact	tccagtcgaa	tgctgaacgc	cgctgccccc	actgcaacga
ctaactggccc	cacgagatcc	caaaagtctt	gcacctgag	aaggagaggg	agtcctgggt
cttgaatcgc	aaacaaaagt	cctgcggctc	aggcagcatt	agccatctgt	ggcgtctgag
gggctggctg	ccttgagttg	cctgatgcgc	acagcccttc	ttggaagaaa	ccctctcygtg
tttcagggtc	cacgcgagtc	acctctttcg	tcttaattgt	cacgctccac	agctttggaa
ttaaacattc	tggaagtttr	aaaaaaaaa	aaaaaaaaa	tttggggggg	ggggccc

<210> 44
 <211> 1904
 <212> DNA
 <213> Homo sapiens

<400> 44					
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ctaactttatt	tgagcaatag	ttgagactta	attgcctata	aatcaacaac	caaatgamct
attgtttttt	ttttctcaca	acatctggcc	tatatgtctt	gtcaggargc	catggctcca
atttaaaagta	catagtttctt	acatacttcc	aactgcagct	gttccctgac	ctcaccaggt
wtcagagatg	ttcttwaagg	aacgcagctg	tgccagggtca	cagattcatg	ggaaatggaa
agaaccaagg	aataatagctc	ttgcctcacc	ttcttcccca	ctcgagatatt	agttccaagcc
agagtaattg	agcaactata	cttactagcc	tctcaggctg	ctctactccc	tacctccagc
tgtacagccc	cttcccactct	ctttagtccc	ctttccctca	cttccccttt	tataatgtta
ccataaatcag	ggagcagttag	atcacattat	aacctacttt	gtcataggga	ttcgattttt
ttatatacaa	atcatgtttt	ctgaaaccca	gctggggcat	atgcaactca	tgttcaatcc
ataacttatta	atgtaccgga	tattggcctt	gccctggat	atcagaacaa	tattataaaa
gtttccagta	gatgagacga	ttgagcttga	atacaattgc	agtaaatgtg	gccaataaag
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agctatcccta	attactcgaa	ataaatattt	gttcttatag	tttttaaatc	aaaagaaaaa
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aattttccagt	agctaattta	aaatttcaga	aaatgtctat	aaagaatttt	gattccaagta
tttaaatctg	ttagtttatgc	atgcttctta	ttaaccgaaa	atgataatac	catcttagttt
agtgatcagt	atgagaagca	atacctaata	ctatgttgtc	atgtgatatt	ttcttagttg
gtgtgcctgc	tcagaaaaaac	ataactgtga	tggtgatata	tacctgtgtg	tatatataaa
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cttttttccat	agataaaatg	ccacattgat	gataattttc	agacactagt	ttcggagattg
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atatttcaaa	aagcatgaa	atagattatt	tcataaattg	tatactttac	cagtaagttt	1860
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<210> 45
 <211> 1625
 <212> DNA
 <213> Homo sapiens

<400> 45						
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tgctgcagga	ggaagaactg	gctcatgaga	ctgcacaaaa	aggggaggga	aagtgtcata	180
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caaaaaataga	ggaatctact	ccagtgacacg	attctcctgg	aaaagacgac	gcggtaccag	300
attttgatggg	tcccatctct	gaccagggtg	agcacagtgg	cactgtgggg	gtgcctgtga	360
gctacacaga	ctgtgctcct	tcaccogtcg	gtgtgtcagt	tgtgacatca	gatagcttca	420
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aagactctat	agatatgtac	atttcttcaa	ggagaagaga	agatcagttc	ttaaaggctta	1020
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aaaaa						1625

<210> 46
 <211> 593
 <212> DNA
 <213> Homo sapiens

<400> 46						
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tgactccctc	gataccctct	acctcatgga	gctgaaggag	gaggtccagg	agggccaagcg	180
ctcgttggga	gagagcttcc	acctgaacgt	gagcggagaa	gcatcttgtt	ttgaggtgaa	240
catccgctac	atcgggggac	tcctctcagc	cttctacctg	acaggagaga	aggtgttccg	300
aataaaggcc	atcaggtctg	gagagaagct	ctcgcggggc	ttcaaacacc	ccacgggaat	360
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<210> 47
 <211> 1792
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (487)..(487)
 <223> n equals a,t,g, or c

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<220>
<221> misc_feature
<222> (1306)..(1306)
<223> n equals a,t,g, or c
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<220>
<221> misc_feature
<222> (1686)..(1686)
<223> n equals a,t,g, or c
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<400> 47
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ccctcctcaa attataaggt aaatgacaca aagttgaaca tagggtcagt gttgggcaaa 180
aagcatttaa aatatagata acggggtcaa gattttgtgt gtgtgcaaac actgggtttt 240
gtttttcagg atgacaccaa tttagaaagt gcatgatttt gaaaactata tgtgttaattg 300
tgacaaaact aaactgtaga gaaaagacaa aatcaagcaa aacaaaaaac caagaaacca 360
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gccagcccc agttcccact tttagagctc accacgcctt ttgggattcc cgtgggggtg 1680
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cctgtcagct agaaggctga gaggagctcc ccgatgtagc tcgtgccgaa tt 1792
```

```
<210> 48
<211> 785
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (704)..(704)
<223> n equals a,t,g, or c
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```
<220>
<221> misc_feature
<222> (746)..(746)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc_feature
<222> (753)..(753)
<223> n equals a,t,g, or c
```

```
<400> 48
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gagctttttc agaagcgcca tcccaggaca cgtcgggaag caagcatecc cagagctgtc 180
```


tggaaagagg	accaaagacg	tctaaaaagt	catttggaaa	tatctctaaa	tatttgttac	240
catgtataag	ctgcataaag	gaaattgggc	ccaacaaaac	taattgaata	attgaggcag	300
atttgtgtgt	atcatcaaat	tctatccaga	agttgaagaa	tctgaattta	aagattgtgt	360
gcattttaata	agaggatgac	ctttcagttt	aatttccacta	tagaagacca	tctgtgaaat	420
gaatttaaac	ccatlagaga	tggagctttg	accctggatt	cctcaaaaaga	gctgtcagtc	480
tcagaaagtc	aaaaagggga	agagagggac	agaaaaatgtt	ctgcagaaac	atttgacttg	540
cctcaggatc	actgtctggga	acataagtca	atggaaaatg	cagctccctc	tcaaacacac	600
gacagtcacc	tcagtcgagc	cagcaggtca	aggaacttgg	gagccacatg	ggaaaacagc	660
ctctcttgag	agcttggcaa	agrgcmtgc	tatgccttaa	aggnntttaa	gaagrtgttt	720
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rgtta						785

<210> 49

<211> 1433

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (893)..(893)

<223> n equals a,t,g, or c

<220>

<221> misc_feature

<222> (947)..(947)

<223> n equals a,t,g, or c

<400> 49

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tcccgcgctg	gctcaccgcc	tcaccatctc	gggtgtcttt	taggagaatc	cttcagtgcg	300
ctgcagcagc	gtctcctgag	agagaaggag	gccaagatca	ggaaagcctt	ggacaggctt	360
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gccatccagc	cacgggacca	gctgtttgcc	acgtggagc	tcacggccca	ccggggcacg	540
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cacggcctca	tccagtcctt	ctccgccacc	ctggaagacg	tggcccactc	ggatctctat	660
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<210> 50

<211> 652

<212> DNA

<213> Homo sapiens

<400> 50

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tttcgaccata	gtgcactaga	tacagctact	ttctggctgac	ttttcaaggg	ggaccaccc	240
acctgtcatc	ttcttcaactg	tcagaaatga	ctgtgtcagt	ggcactccaa	actcctctgc	300
tgctcttttc	caaggagaca	gctaaggtgg	atggagatgc	agaattggacc	tccagttcgc	360
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cagtagctct	gccgcctcttc	ccagagagggg	ggtccaggggg	acatctctgga	aggtggggcc	600
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<210> 51
 <211> 2541
 <212> DNA
 <213> Homo sapiens

<400> 51						
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agtttggtga	tggttggtgaa	gggggaattg	gaaattaaat	gaaaacctat	gactttgggtc	180
atgtccaatt	gtaagacaca	tcagtaaaag	ggtattatgc	tcgtgtgggt	ttgtttttttt	240
gttttgcctt	tttttttttt	ttttcttttt	tggttttttg	tgatgtggct	taaaatgcaat	300
agtttctttt	tgggacatat	ttctgcctat	taaaagctag	aaggcacaac	ttttttttttt	360
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tacatggcaa	aattgttgtct	accttagttt	aaaaaacaa	ctcaaacaaa	agacttgtctt	720
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ttactctgtt	tataatatca	agtattttct	taaaagata	gatattaaac	cttgtgtctca	960
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ggaataactt	aatcaatcat	catgtattaa	aatggaataa	agaaagagca	gctgccactt	2400
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aaaaaaaaaa	aaaaaaaaaa	a				2520
						2541

<210> 52
 <211> 701
 <212> DNA
 <213> Homo sapiens

<400> 52						
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taatacgcata	ttttcccaac	atcaagacaa	ctaaaaacaa	tgataaaaaat	gtttattttt	180
acactccagc	atattcgggtg	agtttttagg	atgtgtatga	atatttaaat	cttttaattt	240
cagtttttaat	gaaagctgaa	cttaaatagg	aaagctagct	cttggttaact	agcaatgac	300

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aggcattgtt  tgcctctgtc  aggttttctt  atctgtttta  ggtacatttt  ttcagattct  360
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atttcatatt  aattlagaaa  attcctgtgt  ttactttat  tttaaatlgt  gaaatggatc  480
caatcattag  aacagagaga  atagttcttt  gaaactgaaa  tactttagtt  ttaactgac  540
tgtgtaaaag  taatgatga  aaccagcttc  caaaagaaac  cagcataatg  cactataaac  600
tattcatatt  gagcacatt  ctltaccatg  gatatattaa  ttatgtatta  tagtggagtg  660
atcacacagk  tccccaaat  gtgatggttc  aagggaattt  a

```

```

<210> 53
<211> 375
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (153)..(153)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc_feature
<222> (313)..(313)
<223> n equals a,t,g, or c

```

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<400> 53
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gtctggaggt  gagctaattg  atgagtgaat  atnagcagtg  ggtgttcttc  atctctttga  180
ggattttgct  cagagttcac  taccagggaa  ttcttggaac  taggwgccat  tctttacatc  240
agttcttgag  ggtttcttga  tatcaggggc  aaaatgatcc  ctctctcttt  ctctcttata  300
tcctgtgctt  gngctctcgg  gtgatcttct  ttcaagtcag  ttgtggggag  tgccataggaa  360
caacgctaac  acggg

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```

<210> 54
<211> 1146
<212> DNA
<213> Homo sapiens

```

```

<400> 54
tcgaccacag  cgtccgatag  agacgctgaa  ccatgaacat  tatgagtgtc  aatacgtaat  60
taattggcag  tctccgacct  tgactgccc  gattcacttc  agaccagagc  ttccagagaa  120
gagaaacag  ttaattcagc  ggcttccaat  gggagctgtc  attaagtgtc  tatgtattat  180
caaggagcc  tcttggaaga  agaaggatta  ctgtggctgc  atgatcattg  aagatgaaga  240
tgctccaatt  tcaataacct  tggatgacac  caagccagat  gggtcactgc  ctgccatcat  300
gggcttcaat  ctgtcccgg  aagctgatcg  acttgctaa  ctacataagg  aaataaggaa  360
gaagaaaatc  tgtgagctct  atgccaaagt  gtggggtacc  caagaagctt  tacatccagt  420
gcattatgaa  gagaagaact  ggtgtgagga  gcagtactct  gggggctgct  acacggccta  480
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tttctttg  ggcacagaga  ctgccacaaa  gtggagcgcc  tacatggaag  gggcagttga  600
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ttaaaggctg  tgtcattggg  ccatgtttaa  gtgtactgga  tttaactacc  ttgggcttaa  960
ttccaatcat  tgttaaagta  aaaacaatc  aaagaatcac  ctaatttaatt  tcagtaagat  1020
caagctccat  ctattttgtc  agtgtagatc  aactcatggt  aattgataga  ataaagcctt  1080
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aaaaaa

```

```

<210> 55
<211> 2299
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature

```

<222> (179)..(180)
 <223> n equals a,t,g, or c

<400> 55
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 gctcatatcat catgttttag ctttggatttc tttttttttt ttccttctat tccctccomn 180
 ccccccoccc gcgccctttt ttttytyttt gcaaaacocat tttttgggct gataaggtat 240
 gagctttttcc ctttgcaact aatgatgttc tctccgtctc atcggcgatg tggggggcag 300
 ctgtcccgag gtcactgttt actcaagggt gttccttagga ggcgtgcgct cttactatgt 360
 ccttgatgtt gctacactta ttgttggtatc gtggagttta aaagatcaag ttagatgtgt 420
 gactatgagt tattaatgaa agtggtgcac cagttttttc atgtgttaaa actaagaat 480
 ttcgctctgc agtttgaaaa actgtggcca cagctgtgac ttgcagccca cctgccacc 540
 aggcagggcc ctgcactttg aataggcctt ccattttgtt ttggaggttc tcactttgaa 600
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 tcatttaaaa aaaatgtaaa agacaaaaaa aaaaaggagg atgatttaaa agatgctttc 720
 tatctctggg aaaaaggagg agcatttgcc catgttcttt tgtttttcta ttcctgtccc 780
 aaatcaaaa gcatgtgtct caggaaaaac agtccccag tttaaaaaaa aaaaaaaa 840
 tctcttgtat tttcttagag gaaaaaaga aaaaacccaa cttttagcac tgactacta 900
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 aaaaaaaaaa aaaaaaaaaa 2299

<210> 56
 <211> 2259
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (2213)..(2213)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (2242)..(2242)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (2247)..(2247)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature

<222> (2250)..(2250)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (2253)..(2253)
 <223> n equals a,t,g, or c

<400> 56
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 cggggttatga aaaatctgtg ccatcactgt gattttatcc aagactgctc cacttaccoc 180
 agtgcgtgggg acaagttctct gtgtaaaact tagatagcag aattatttgc aatttgtagc 240
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 gttttaaataca attaatggc attgaaacc tagggtttcc ttttgattaa gagccttttt 360
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 ctcccaatgg atcattcagg agtgcctctat gtgagaattg agccaaggaa aatactcatg 1260
 caaccagcct gactgcggcg gaggggacga gaggtgtgac acacattggt agttattttg 1320
 caccagcagt gccctttctca ctgggggtac ttggaccctc aga tctcttct ttttaattagc 1380
 catttgccac cccaagtgtt atgtgggcca tttctcttta aaacacttcc cctacctttc 1440
 ccatgtctc agtttagctc tcaaaagaagg ggtgaatcat aagaccagtg aaatlttccac 1500
 cctctgaggg agttccccaa tctgaagggg aagagggtga cctcagcgcc ttttctccca 1560
 aaaatcggtg gaaggtggt tgtggatcct tgttctctc ctgaccctat ctggctgctg 1620
 ccccgctctcc caccctctgt cccggggctc gctggccctc cactcccgct tagtccctggg 1680
 gccggcgaca cagtgggggc tctctacttg ctgcagtgtc atagcaataa aatglgattc 1740
 ttgggggtccc ccaggggagc tgcccatggc tttatttatg aacctggttt tggggagtca 1800
 gggggaggaga tgactttgct tctgtgcaca gcccgtctt ccaggagcca cgcactgaa 1860
 gaaaagggtg ctcagacttt tgttatagac atttctgtg tgtaaataa tgtttacaat 1920
 tttatatata agatggaaata atctcagctg tatattttt acttttatag 1980
 atttcaaaac tatgacctt tatatgtgt ctttggggga gctatgataa gttttatggc 2040
 aaacggttgg tattgttaac tttttatgt catcaaaagt tcaataaaag cctatataatc 2100
 cccatattct tctactgcgc ttaactctgg tatacccaa aagaatact ttaactttct 2160
 tgttttatca ttataaaaat aaagtatttt gctagtattg aaaaaacctt tgnatttgac 2220
 gtcacctgtg gtcgtgctgc anaaagnttn gngaatgg 2259

<210> 57
 <211> 1325
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1302)..(1302)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (1313)..(1313)
 <223> n equals a,t,g, or c

<400> 57
 ttaaaacaag atacatacat agtataaac acctcacagt gtttaagattt atattgtgaa 60
 atgagacacc ctaccttcaa tegtctatca gtgggtaaaa caaatcttga tgcatttca 120

```

ggacaaatga ttagccctaa atgaaactgt aataatttca gtggaaactc aatctgtttt 180
taccttttaa cagtgaattt tacatgaatg aatgggttct tcactttttt ttttagtata 240
gaaaattata cagtgtctaa ttttcagaga ttctttccat atgttactaa aaaaattttt 300
gttcagccta acatactgag ttttttttaa cttttcaat tatgaaatt ccatcatgca 360
ttcatccaaa attaaggcag actggttggg ttcttccagt ggccagatga gctaaattaa 420
atccaaaaag cagatgcttt tgtatgatct ccaaatgtcc aactttaagg aaatatattc 480
ttgaaattgt cttttaagat cttttgagc ttgacagata ccacagactga gctggaactg 540
gaaattgtct tcttatgtac tctacttctt taaaggcggc tgcccattac attctcagc 600
tgtctctgca gttaggttga catgtgactg agtgttgcc agtgagatga agtctctca 660
aaggaaagga gcatgtgtcc tttttatccc ctctatctgt ctgtgggatg agtctgata 720
accaggagcca tggcagctgt ctccagagga tcaaaagcac acccaagag taagcgagat 780
tagagaccag aaagaacctg actacttccc tcttccact gcttttccct gcattkaagc 840
catgttgatg ctgggtgtgt tacatgaagt gaaaattaat tctttctgcc cttcagttct 900
ttatcttgat accatttaac actgtctgaa ttaactagac tgcaataatt ctttcttttg 960
aaagctttta aaggataatg tgcaattcac attaaaattg attttccatt gtcaattagt 1020
tatactcatt ttctgtcctt gatctttcat tagatatatt gtatctgctt ggaatatatt 1080
attcttcttt taactgtgta attggtaatt actaaaactc tgtaatctcc aaaaattatg 1140
tatcaaatga cacaccatgt ttctatcat tctcatagat ctgctttata aacattttaa 1200
taaaaagtac tatttaatga ttaaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa 1260
aaaaaaagg gaaaaaaa aaaaaaaa aaaaaaaa angggggggg ggnccaaaaa 1320
aaaaa

```

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<210> 58
<211> 832
<212> DNA
<213> Homo sapiens

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<400> 58
gcgtcgacat agaattgaag ttgctcgta gctgattgaa gataaggaga ttggcctgga 60
ttatccaggt aggtcctaag taatcaggaa gggcctttaa agtgagagag gtagggagaa 120
gaggaagtca gagcgatgtg ctgtgaaatc tactaccgtt tgctggtttt gaaaatggag 180
aaaaagagtg aggaactgag aaacatggat ggcttgggga acgtggaaaaa gggctactga 240
aatgggacga catgaactca agggagctat ttatgacctat gtcatttgca acatgaagaa 300
agcttatctg gagtgaagt aaatgagacc aacagagatr agagaccggg agaaatcctg 360
gttacactgt ttgaatcctg tcagtctcat actggagtcc tgtaataaca aaataatagt 420
aataatccct ctgtttctta tgtttatgcc aacttcaaca aaaagaaact tgactaagag 480
acaataaag gtatatgagt cctttttcac gatgcgatgt catgtctttt caccacgggg aatgtgaaag 540
tcaataaaaa gagaataaagc aggatctgcm agagaacaca atcccttttt aacttgctggg 600
aagatacctt tagtcattaa tgrctggagc acaattttgg rcamtatatg agctattggc 660
cggtttgtga tggatgtgatt gggcctctaa gtgacaacat ttgttctctgt atagagtggg 720
tgccaagtgc attttataaaa ttggccatca tggcgtgtta atttaaaaaa aa 780

```

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<210> 59
<211> 132
<212> DNA
<213> Homo sapiens

```

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<400> 59
cttgagcccc tgagttgttg gggtaggggtg aagagcatat cccacaagag gccccacagg 60
gagcagagac tgcctttaa cctgctgaca tcacggaaaa gcaacagagc atttttcaact 120
ttgtcaatat gt

```

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<210> 60
<211> 54
<212> PRT
<213> Homo sapiens

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<400> 60
Met Ala Phe Leu Gln Val Leu Ser Arg Tyr His Ser Ala Asn His Cys
1 5 10 15
Tyr Arg Met Val Thr Ser Phe Val Leu Thr Val Gln Gln Gln Ile Trp
20 25 30
Val Arg Leu Asn Leu Ser Val Asn Phe Phe Phe Trp Cys Phe Phe Gly

```

35

40

45

Leu Met Thr Val Ser Leu
50

<210> 61

<211> 117

<212> PRT

<213> Homo sapiens

<400> 61

Met Phe Pro Phe Tyr 5 Ser Cys Trp Arg Thr Gly Leu Leu Leu Leu Leu
1 5 10 15

Leu Ala Val Ala Val Arg Glu Ser Trp Gln Thr Glu Glu Lys Thr Cys
20 25 30

Asp Leu Val Gly Glu Lys Gly Lys Glu Ser Glu Lys Glu Leu Ala Leu
35 40 45

Val Lys Arg Leu Lys Pro Leu Phe Asn Lys Ser Phe Glu Ser Thr Val
50 55 60

Gly Gln Gly Ser Asp Thr Tyr Ile Tyr Ile Phe Arg Val Cys Arg Glu
65 70 75 80

Ala Gly Asn His Thr Ser Gly Ala Gly Leu Val Gln Ile Asn Lys Ser
85 90 95

Asn Gly Lys Glu Thr Val Val Gly Arg Leu Asn Glu Thr His Ile Phe
100 105 110

Asn Gly Arg Gln Phe
115

<210> 62

<211> 183

<212> PRT

<213> Homo sapiens

<400> 62

Met Val Arg Met Val 5 Pro Val Leu Leu Ser Leu Leu Leu Leu Leu Gly
1 5 10 15

Pro Ala Val Pro Gln Glu Asn Gln Asp Gly Arg Tyr Ser Leu Thr Tyr
20 25 30

Ile Tyr Thr Gly Leu Ser Lys His Val Glu Asp Val Pro Ala Phe Gln
35 40 45

Ala Leu Gly Ser Leu Asn Asp Leu Gln Phe Phe Arg Tyr Asn Ser Lys
50 55 60

Asp Arg Lys Ser Gln Pro Met Gly Leu Trp Arg Gln Val Glu Gly Met
65 70 75 80

Glu Asp Trp Lys Gln Asp Ser Gln Leu Gln Lys Ala Arg Glu Asp Ile
85 90 95

Phe Met Glu Thr Leu Lys Asp Ile Val Glu Tyr Tyr Asn Asp Ser Asn
100 105 110

Gly Ser His Val Leu Gln Gly Arg Phe Gly Cys Glu Ile Glu Asn Asn
 115 120 125
 Arg Ser Ser Gly Ala Phe Trp Lys Tyr Tyr Tyr Asp Gly Lys Asp Tyr
 130 135 140
 Ile Glu Phe Asn Lys Glu Ile Pro Ala Trp Val Pro Phe Asp Pro Ala
 145 150 155 160
 Ala Pro Tyr Ser Cys His Val Gln His Ser Ser Leu Ala Gln Pro Leu
 165 170 175
 Val Val Pro Trp Glu Ala Ser
 180

<210> 63
 <211> 205
 <212> PRT
 <213> Homo sapiens

<400> 63
 Met Leu Gln Gln Asp Ser Asn Asp Asp Thr Glu Asp Val Ser Leu Phe
 1 5 10 15
 Asp Ala Glu Glu Glu Thr Thr Asn Arg Pro Arg Lys Ala Lys Ile Arg
 20 25 30
 His Pro Val Ala Ser Phe Phe His Leu Phe Phe Arg Val Ser Ala Ile
 35 40 45
 Ile Val Tyr Leu Leu Cys Glu Leu Leu Ser Ser Ser Phe Ile Thr Cys
 50 55 60
 Met Val Thr Ile Ile Leu Leu Leu Ser Cys Asp Phe Trp Ala Val Lys
 65 70 75 80
 Asn Val Thr Gly Arg Leu Met Val Gly Leu Arg Trp Trp Asn His Ile
 85 90 95
 Asp Glu Asp Gly Lys Ser His Trp Val Phe Glu Ser Arg Lys Glu Ser
 100 105 110
 Ser Gln Glu Asn Lys Thr Val Ser Glu Ala Glu Ser Arg Ile Phe Trp
 115 120 125
 Leu Gly Leu Ile Ala Cys Pro Val Leu Trp Val Ile Phe Ala Phe Ser
 130 135 140
 Ala Leu Phe Ser Phe Arg Val Lys Trp Leu Ala Val Val Ile Met Gly
 145 150 155 160
 Val Val Leu Gln Gly Ala Asn Leu Tyr Gly Tyr Ile Arg Cys Lys Val
 165 170 175
 Arg Ser Arg Lys His Leu Thr Ser Met Ala Thr Ser Tyr Phe Gly Lys
 180 185 190
 Gln Phe Leu Arg Gln Asn Thr Gly Asp Asp Gln Thr Ser
 195 200 205

<210> 64
 <211> 213

<212> PRT

<213> Homo sapiens

<400> 64

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Met Gly Asn Gly Thr Glu Glu Asp Tyr Asn Phe Val Phe Lys Val Val
 1          5          10          15

Leu Ile Gly Glu Ser Gly Val Gly Lys Thr Asn Leu Leu Ser Arg Phe
          20          25          30

Thr Arg Asn Glu Phe Ser His Asp Ser Arg Thr Thr Ile Gly Val Glu
          35          40          45

Phe Ser Thr Arg Thr Val Met Leu Gly Thr Ala Ala Val Lys Ala Gln
          50          55          60

Ile Trp Asp Thr Ala Gly Leu Glu Arg Tyr Arg Ala Ile Thr Ser Ala
 65          70          75          80

Tyr Tyr Arg Gly Ala Val Gly Ala Leu Leu Val Phe Asp Leu Thr Lys
          85          90          95

His Gln Thr Tyr Ala Val Val Glu Arg Trp Leu Lys Glu Leu Tyr Asp
          100          105          110

His Ala Glu Ala Thr Ile Val Val Met Leu Val Gly Asn Lys Ser Asp
          115          120          125

Leu Ser Gln Ala Arg Glu Val Pro Thr Glu Glu Ala Arg Met Phe Ala
          130          135          140

Glu Asn Asn Gly Leu Leu Phe Leu Glu Thr Ser Ala Leu Asp Ser Thr
          145          150          155          160

Asn Val Glu Leu Ala Phe Glu Thr Val Leu Lys Glu Ile Phe Ala Lys
          165          170          175

Val Ser Lys Gln Arg Gln Asn Ser Ile Arg Thr Asn Ala Ile Thr Leu
          180          185          190

Gly Ser Ala Gln Ala Gly Gln Glu Pro Gly Pro Gly Glu Lys Arg Ala
          195          200          205

Cys Cys Ile Ser Leu
          210

```

<210> 65

<211> 97

<212> PRT

<213> Homo sapiens

<400> 65

```

Met Leu Gly Asn Lys Arg Leu Gly Leu Ser Gly Leu Thr Leu Ala Leu
 1          5          10          15

Ser Leu Leu Val Cys Leu Gly Ala Leu Ala Glu Ala Tyr Pro Ser Lys
          20          25          30

Pro Asp Asn Pro Gly Glu Asp Ala Pro Ala Glu Asp Met Ala Arg Tyr
          35          40          45

Tyr Ser Ala Leu Arg His Tyr Ile Asn Leu Ile Thr Arg Gln Arg Tyr
          50          55          60

```

Gly Lys Arg Ser Ser Pro Glu Thr Leu Ile Ser Asp Leu Leu Met Arg
65 70 75 80

Glu Ser Thr Glu Asn Val Pro Arg Thr Arg Leu Glu Asp Pro Ala Met
85 90 95

Trp

<210> 66

<211> 266

<212> PRT

<213> Homo sapiens

<400> 66

Met Gln Gly Ser Thr Arg Arg Met Gly Val Met Thr Asp Val His Arg
1 5 10 15

Arg Phe Leu Gln Leu Leu Met Thr His Gly Val Leu Glu Glu Trp Asp
20 25 30

Val Lys Arg Leu Gln Thr His Cys Tyr Lys Val His Asp Arg Asn Ala
35 40 45

Thr Val Asp Lys Leu Glu Asp Phe Ile Asn Asn Ile Asn Ser Val Leu
50 55 60

Glu Ser Leu Tyr Ile Glu Ile Lys Arg Gly Val Thr Glu Asp Asp Gly
65 70 75 80

Arg Pro Ile Tyr Ala Leu Val Asn Leu Ala Thr Thr Ser Ile Ser Lys
85 90 95

Met Ala Thr Asp Phe Ala Glu Asn Glu Leu Asp Leu Phe Arg Lys Ala
100 105 110

Leu Glu Leu Ile Ile Asp Ser Glu Thr Gly Phe Ala Ser Ser Thr Asn
115 120 125

Ile Leu Asn Leu Val Asp Gln Leu Lys Gly Lys Lys Met Arg Lys Lys
130 135 140

Glu Ala Glu Gln Val Leu Gln Lys Phe Val Gln Asn Lys Trp Leu Ile
145 150 155 160

Glu Lys Glu Gly Glu Phe Thr Leu His Gly Arg Ala Ile Leu Glu Met
165 170 175

Glu Gln Tyr Ile Arg Glu Thr Tyr Pro Asp Ala Val Lys Ile Cys Asn
180 185 190

Ile Cys His Ser Leu Leu Ile Gln Gly Gln Ser Cys Glu Thr Cys Gly
195 200 205

Ile Arg Met His Leu Pro Cys Val Ala Lys Tyr Phe Gln Ser Asn Ala
210 215 220

Glu Pro Arg Cys Pro His Cys Asn Asp Tyr Trp Pro His Glu Ile Pro
225 230 235 240

Lys Val Phe Asp Pro Glu Lys Glu Arg Glu Ser Gly Val Leu Lys Ser
245 250 255

Asn Lys Lys Ser Leu Arg Ser Arg Gln His

260

265

<210> 67

<211> 149

<212> PRT

<213> Homo sapiens

<400> 67

Met Asn Tyr Leu Phe Phe Phe Leu Thr Thr Ser Gly Leu Tyr Cys Leu
1 5 10 15

Ser Gly Ser His Gly Ser Asn Val Lys Tyr Ile Val Leu Thr Tyr Phe
20 25 30

Asn Cys Ser Trp Ser Leu Thr Ser Pro Gly Phe Arg Asp Val Leu Lys
35 40 45

Gly Ser Gln Leu Trp Gln Val Thr Asp Ser Trp Glu Met Glu Arg Thr
50 55 60

Lys Glu Tyr Ser Ser Cys Leu Thr Phe Leu Pro Thr Ala Asp Ile Val
65 70 75 80

Gln Ala Arg Val Met Glu Glu Leu Asn Leu Leu Ala Ser Gln Ala Ala
85 90 95

Pro Ile Pro Thr Ser Gln Cys Thr Ala Pro Pro His Leu Phe Ser Pro
100 105 110

Leu Ser Leu Thr Ser Pro Phe Ile Met Ser His Lys Ser Gly Thr Val
115 120 125

Gly Ser His Tyr Asn Leu Leu Cys His Arg Asp Ser Ile Phe Leu Ile
130 135 140

Ser Asn His Val Ser
145

<210> 68

<211> 277

<212> PRT

<213> Homo sapiens

<400> 68

Met Ser Lys Lys Lys Ser Arg Gln Gly Lys Leu Val Lys Gln Phe Ala
1 5 10 15

Lys Ile Glu Glu Ser Thr Pro Val His Asp Ser Pro Gly Lys Asp Asp
20 25 30

Ala Val Pro Asp Leu Met Gly Pro His Ser Asp Gln Gly Glu His Ser
35 40 45

Gly Thr Val Gly Val Pro Val Ser Tyr Thr Asp Cys Ala Pro Ser Pro
50 55 60

Val Gly Cys Ser Val Val Thr Ser Asp Ser Phe Lys Thr Lys Asp Ser
65 70 75 80

Phe Arg Thr Ala Lys Ser Lys Lys Lys Arg Arg Ile Thr Arg Tyr Asp
85 90 95

Ala Gln Leu Ile Leu Glu Asn Asn Ser Gly Ile Pro Lys Leu Thr Leu
 100 105 110

Arg Arg Arg His Asp Ser Ser Ser Lys Thr Asn Asp Gln Glu Asn Asp
 115 120 125

Gly Met Asn Ser Ser Lys Ile Ser Ile Lys Leu Ser Lys Asp His Asp
 130 135 140

Asn Asp Asn Asn Leu Tyr Val Ala Lys Leu Asn Asn Gly Phe Asn Ser
 145 150 155 160

Gly Ser Gly Ser Ser Ser Thr Lys Leu Lys Ile Gln Leu Lys Arg Asp
 165 170 175

Glu Glu Asn Arg Gly Ser Tyr Thr Glu Gly Leu His Glu Asn Gly Val
 180 185 190

Cys Cys Ser Asp Pro Leu Ser Leu Leu Glu Ser Arg Met Glu Val Asp
 195 200 205

Asp Tyr Ser Gln Tyr Glu Glu Glu Ser Thr Asp Asp Ser Ser Ser Ser
 210 215 220

Glu Gly Asp Glu Glu Glu Asp Asp Tyr Asp Asp Asp Phe Glu Asp Asp
 225 230 235 240

Phe Ile Pro Leu Pro Pro Ala Lys Arg Leu Arg Leu Ile Val Gly Lys
 245 250 255

Asp Ser Ile Asp Ile Asp Ile Ser Ser Arg Arg Arg Glu Asp Gln Ser
 260 265 270

Leu Arg Leu Asn Ala
 275

<210> 69

<211> 94

<212> PRT

<213> Homo sapiens

<400> 69

Met His Ser Met Glu His Lys Leu Leu Trp Ile Leu Gln Leu Val Thr
 1 5 10 15

Trp Asn Cys Phe Leu Val His Met Asn Thr Gly Ser Ile Gln Ala Gln
 20 25 30

Leu Leu Pro Thr Ala Ser Leu Trp Ala Ser Cys Ser Gln Lys Ala Phe
 35 40 45

His Leu Met Leu Pro Ile Ala Cys Leu Leu Ser Ser Arg Val Trp Pro
 50 55 60

Ile Cys His Gly Glu Ala Ala Val Ser Lys Pro Ala Gly Asn Trp Asp
 65 70 75 80

Val Ala Gly Asp Glu Arg Thr Asp Pro Ser Val Leu Pro Ala
 85 90

<210> 70

<211> 449

<212> PRT
 <213> Homo sapiens

<400> 70

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Met Gln Phe Ala Trp 5 Gln Ser Tyr Lys Arg Tyr Ala Met Gly Lys Asn
1 5 10 15

Glu Leu Arg Pro 20 Leu Thr Lys Asp Gly Tyr Glu Gly Asn Met Phe Gly
20 25 30

Gly Leu Ser 35 Gly Ala Thr Val Ile Asp Ser Leu Asp Thr Leu Tyr Leu
35 40 45

Met Glu Leu Lys Glu Glu Phe Gln Glu Ala Lys Ala Trp Val Gly Glu
50 55 60

Ser Phe His Leu Asn Val Ser Gly Glu Ala Ser Leu Phe Glu Val Asn
65 70 75 80

Ile Arg Tyr Ile Gly Gly Leu Leu Ser Ala Phe Tyr Leu Thr Gly Glu
85 90 95

Glu Val Phe Arg 100 Ile Lys Ala Ile Arg Leu Gly Glu Lys Leu Leu Pro
100 105 110

Ala Phe Asn Thr Pro Thr Gly Ile Pro Lys Gly Val Val Ser Phe Lys
115 120 125

Ser Gly Asn Trp Gly Trp Ala Thr Ala Gly Ser Ser Ser Ile Leu Ala
130 135 140

Glu Phe Gly Ser Leu His Leu Glu Phe Leu His Leu Thr Glu Leu Ser
145 150 155 160

Gly Asn Gln Val Phe Ala Glu Lys Val Arg Asn Ile Arg Lys Val Leu
165 170 175

Arg Lys Ile Glu Lys Pro Phe Gly Leu Tyr Pro Asn Phe Leu Ser Pro
180 185 190

Val Ser Gly Asn Trp Val Gln His His Val Ser Val Gly Leu Gly
195 200 205

Asp Ser Phe Tyr Glu Tyr Leu Ile Lys Ser Trp Leu Met Ser Gly Lys
210 215 220

Thr Asp Met Glu Ala Lys Asn Met Tyr Tyr Glu Ala Leu Glu Ala Ile
225 230 235 240

Glu Thr Tyr Leu Leu Asn Val Ser Pro Gly Gly Leu Thr Tyr Ile Ala
245 250 255

Glu Trp Arg Gly Gly Ile Leu Asp His Lys Met Gly His Leu Ala Cys
260 265 270

Phe Ser Gly Gly Met Ile Ala Leu Gly Ala Glu Asp Ala Lys Glu Glu
275 280 285

Lys Arg Ala His Tyr Arg Glu Leu Ala Ala Gln Ile Thr Lys Thr Cys
290 295 300

His Glu Ser Tyr Ala Arg Ser Asp Thr Lys Leu Gly Pro Glu Ala Phe
305 310 315 320

Trp Phe Asn Ser Gly Arg Glu Ala Val Ala Thr Gln Leu Ser Glu Ser
325 330 335

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Tyr Tyr Ile Leu Arg Pro Glu Val Val Glu Ser Tyr Met Tyr Leu Trp
 340 345 350
 Arg Gln Thr His Asn Pro Ile Tyr Arg Glu Trp Gly Trp Glu Val Val
 355 360 365
 Leu Ala Leu Glu Lys Tyr Cys Arg Thr Glu Ala Gly Phe Ser Gly Ile
 370 375 380
 Gln Asp Val Tyr Ser Ser Thr Pro Asn His Asp Asn Lys Gln Gln Ser
 385 390 395 400
 Phe Phe Leu Ala Glu Thr Leu Lys Tyr Leu Tyr Leu Leu Phe Ser Glu
 405 410 415
 Asp Asp Leu Leu Ser Leu Glu Asp Trp Val Phe Asn Thr Glu Ala His
 420 425 430
 Pro Leu Pro Val Asn His Ser Asp Ser Ser Gly Arg Ala Trp Gly Arg
 435 440 445
 His

 <210> 71
 <211> 372
 <212> PRT
 <213> Homo sapiens

 <400> 71
 Met Thr Phe Gln Phe Asn Phe Thr Ile Glu Asp His Leu Glu Asn Glu
 1 5 10 15
 Leu Thr Pro Ile Arg Asp Gly Ala Leu Thr Leu Asp Ser Ser Lys Glu
 20 25 30
 Leu Ser Val Ser Glu Ser Gln Lys Gly Glu Glu Arg Asp Arg Lys Cys
 35 40 45
 Ser Ala Glu Gln Phe Asp Leu Pro Gln Asp His Leu Trp Glu His Lys
 50 55 60
 Ser Met Glu Asn Ala Ala Pro Ser Gln Asp Thr Asp Ser Pro Leu Ser
 65 70 75 80
 Ala Ala Ser Ser Ser Arg Asn Leu Glu Pro His Gly Lys Gln Pro Ser
 85 90 95
 Leu Arg Ala Ala Lys Glu His Ala Met Pro Lys Asp Leu Lys Met Met
 100 105 110
 Leu Glu Asn Lys Val Ile Glu Thr Leu Pro Gly Phe Gln His Val Lys
 115 120 125
 Leu Ser Val Val Lys Thr Ile Leu Leu Lys Glu Asn Phe Pro Gly Glu
 130 135 140
 Asn Ile Val Ser Lys Ser Phe Ser Ser His Ser Asp Leu Ile Thr Gly
 145 150 155 160
 Val Tyr Glu Gly Gly Leu Lys Ile Trp Glu Cys Thr Phe Asp Leu Leu
 165 170 175

Ala Tyr Phe Thr Lys Ala Lys Val Lys Phe Ala Gly Lys Lys Val Leu
 180 185 190

Asp Leu Gly Cys Gly Ser Gly Leu Leu Gly Ile Thr Ala Phe Lys Gly
 195 200 205

Gly Ser Lys Glu Ile His Phe Gln Asp Tyr Asn Ser Met Val Ile Asp
 210 215 220

Glu Val Thr Leu Pro Asn Val Val Ala Asn Ser Thr Leu Glu Asp Glu
 225 230 235

Glu Asn Asp Val Asn Glu Pro Asp Val Lys Arg Cys Arg Lys Pro Lys
 245 250 255

Val Thr Gln Leu Tyr Lys Cys Arg Phe Ser Gly Glu Trp Ser Glu
 260 265 270

Phe Cys Lys Leu Val Leu Ser Ser Glu Lys Leu Phe Val Lys Tyr Asp
 275 280

Leu Ile Leu Thr Ser Glu Thr Ile Tyr Asn Pro Asp Tyr Tyr Ser Asn
 290 295 300

Leu His Gln Thr Phe Leu Arg Leu Leu Ser Lys Asn Gly Arg Val Leu
 305 310 315 320

Leu Ala Ser Lys Ala His Tyr Phe Gly Val Gly Gly Val His Leu
 325 330 335

Phe Gln Lys Phe Val Glu Glu Arg Asp Val Phe Lys Thr Arg Ile Leu
 340 345 350

Lys Ile Ile Asp Glu Gly Leu Lys Arg Phe Ile Ile Glu Ile Thr Phe
 355 360 365

Lys Phe Pro Gly
 370

<210> 72

<211> 211

<212> FRT

<213> Homo sapiens

<400> 72

Met Thr Thr Leu Thr Arg Gln Asp Leu Asn Phe Gly Gln Val Val Ala
 1 5 10 15Asp Val Leu Cys Glu Phe Leu Glu Val Ala Val His Leu Ile Leu Tyr
 20 25 30Val Arg Glu Val Tyr Pro Val Gly Ile Phe Gln Lys Arg Lys Lys Tyr
 35 40 45Asn Val Pro Val Gln Met Ser Cys His Pro Glu Leu Asn Gln Tyr Ile
 50 55 60Gln Asp Thr Leu His Cys Val Lys Pro Leu Leu Glu Lys Asn Asp Val
 65 70 75 80Glu Lys Val Val Val Val Ile Leu Asp Lys Glu His Arg Pro Val Glu
 85 90 95

Lys Phe Val Phe Glu Ile Thr Gln Pro Pro Leu Leu Ser Ile Ser Ser

```

100              105              110
Asp Ser Leu Leu Ser His Val Glu Gln Leu Leu Arg Ala Phe Ile Leu
115              120              125
Lys Ile Ser Val Cys Asp Ala Val Leu Asp His Asn Pro Pro Gly Cys
130              135
Thr Phe Thr Val Leu Val His Thr Arg Glu Ala Ala Thr Arg Asn Met
145              150              155              160
Glu Lys Ile Gln Val Ile Lys Asp Phe Pro Trp Ile Leu Ala Asp Glu
165              170              175
Gln Asp Val His Met His Asp Pro Arg Leu Ile Pro Leu Lys Thr Met
180              185              190
Thr Ser Asp Ile Leu Lys Met Gln Leu Tyr Val Glu Glu Arg Ala His
195              200              205
Lys Gly Ser
210

<210> 73
<211> 219
<212> PRT
<213> Homo sapiens

<400> 73
Ala Val Val Gly Tyr Thr Asn Cys Gly Lys Thr Thr Leu Ile Lys Ala
1      5      10
Leu Thr Gly Asp Ala Ala Ile Gln Pro Arg Asp Gln Leu Phe Ala Thr
20      25      30
Leu Asp Val Thr Ala His Ala Gly Thr Leu Pro Ser Arg Met Thr Val
35      40      45
Leu Tyr Val Asp Thr Ile Gly Phe Leu Ser Gln Leu Pro His Gly Leu
50      55      60
Ile Glu Ser Phe Ser Ala Thr Leu Glu Asp Val Ala His Ser Asp Leu
65      70      75      80
Ile Leu His Val Arg Asp Val Ser His Pro Glu Ala Glu Leu Gln Lys
85      90      95
Cys Ser Val Leu Ser Thr Leu Arg Gly Leu Gln Leu Pro Ala Pro Leu
100      105      110
Leu Asp Ser Met Val Glu Val His Asn Lys Val Asp Leu Val Pro Gly
115      120      125
Tyr Ser Pro Thr Glu Pro Asn Val Val Pro Val Ser Ala Leu Arg Gly
130      135      140
His Gly Leu Gln Glu Leu Lys Ala Glu Leu Asp Ala Ala Val Leu Lys
145      150      155      160
Ala Thr Gly Arg Gln Ile Leu Thr Leu Arg Val Arg Leu Ala Gly Ala
165      170      175
Gln Leu Ser Trp Leu Tyr Lys Glu Ala Thr Val Gln Glu Val Asp Val
180      185      190

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Ile Pro Glu Asp Gly Ala Ala Asp Val Arg Val Ile Ile Ser Asn Ser
195 200 205

Ala Tyr Gly Lys Phe Arg Lys Leu Phe Pro Gly
210 215

<210> 74
<211> 221
<212> PRT
<213> Homo sapiens

<400> 74
Met Leu Ser Leu Pro Leu Arg Ala Pro Ala Pro Arg Leu Glu Arg Arg
1 5 10 15
Pro Ala Gly Pro Pro Ala Asp Val Phe Leu Val Pro Lys Arg Val Val
20 25 30
Arg Ala Ser Arg Pro Leu Arg Asp Leu Arg Ala Ser His Arg Ala Pro
35 40 45
Arg Thr Gln Arg Ala Trp Ser Ser Pro Leu Thr Pro Ser Pro Ala Gly
50 55 60
Thr His Ala Gly Ser Thr His Thr Ser Ala Pro Pro Pro Asn Phe Trp
65 70 75 80
Glu Arg Thr Pro Gly Ser Ala Gln Pro Leu Ala Phe Gln Lys Pro Leu
85 90 95
Tyr Ala Tyr Leu Ile Phe Val Ile Gly Asp Glu Pro Ser Leu Leu Ser
100 105 110
Pro Phe Pro His Thr His Gln Ser Pro Leu Ala Ile Pro Ser Pro Ser
115 120 125
Ala Ser Pro Pro Pro Ser Cys Ala Pro Ala Pro His Ser His Pro Pro
130 135 140
Pro Ile Gly Leu Ala Leu Ala Cys Lys Ser Arg Trp Pro Arg Ala
145 150 155 160
Gln Pro Ser Arg Met Ser Pro Gly Pro Pro Leu Trp Glu Arg Arg Gln
165 170 175
Ser Tyr Trp Pro Leu Thr Arg Pro Leu Gly Pro Arg Ala Arg Gln Ala
180 185 190
Phe Glu Ser Thr Cys Ser Ser Pro Glu Ser Arg Pro Arg Pro Cys Leu
195 200 205
Pro His Arg Ser Arg Pro Gln Ser Thr Leu Pro Gln Leu
210 215 220

<210> 75
<211> 48
<212> PRT
<213> Homo sapiens

<400> 75
Met Leu Cys Trp Phe Cys Phe Phe Val Leu Leu Phe Phe Phe Phe Phe

```

1           5           10           15
Leu Phe Cys Phe Leu Val Met Trp Leu Lys Cys Asn Ser Phe Phe Phe
      20           25           30
Gly Thr Tyr Phe Cys Gln Leu Lys Thr Arg Arg Ala Gln Leu Phe Phe
      35           40           45

```

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<210> 76
<211> 63
<212> PRT
<213> Homo sapiens

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```

<400> 76
Met Lys Thr Gly Gly Lys His Ser Val Ile Arg Tyr Phe Ser Asn Ile
1           5           10           15
Lys Thr Thr Lys Thr Asn Asp Lys Asn Val Tyr Phe Tyr Thr Pro Ala
      20           25           30
Tyr Arg Val Ser Phe Arg Asp Val Tyr Glu Tyr Leu Asn Leu Ile
      35           40           45
Ser Val Leu Met Lys Ala Glu Leu Asn Arg Lys Ala Ser Ser Trp
      50           55           60

```

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<210> 77
<211> 36
<212> PRT
<213> Homo sapiens

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```

<400> 77
Met Phe Ser Val Leu Cys Leu Cys Val Cys Ala Arg Gln Arg Asp Arg
1           5           10           15
Leu Phe Val Lys Ser Ala Ser Cys Leu Gly Ile Phe Val Ser His Leu
      20           25           30
Ala Val Ser Ser
      35

```

```

<210> 78
<211> 395
<212> PRT
<213> Homo sapiens

```

```

<400> 78
Met Val Ser Ser Ser Asn Leu Pro Gln Gly Trp Leu Glu Val Gln Gly
1           5           10           15
Ile Pro Glu Gly Trp Asp Gly Val Ala Gly Trp Tyr Leu Pro Gly Ile
      20           25           30
Asn Pro Gly Arg Thr Ala Arg Arg Phe Ala Tyr Leu Phe Val Asn Ile
      35           40           45
Asn Val Thr Ser Glu Pro His Glu Val Leu Ala Leu Trp Phe Leu Trp

```

50

55

60

Tyr	Val	Lys	Gln	Cys	Gly	Gly	Thr	Thr	Arg	Ile	Phe	Ser	Val	Thr	Asn
65					70				75						80
Gly	Gly	Gln	Glu	Arg	Lys	Phe	Val	Gly	Gly	Ser	Gly	Gln	Val	Ser	Glu
				85				90						95	
Arg	Ile	Met	Asp	Leu	Leu	Gly	Asp	Gln	Val	Lys	Leu	Asn	His	Pro	Val
			100					105					110		
Thr	His	Val	Asp	Gln	Ser	Ser	Asp	Asn	Ile	Ile	Ile	Glu	Thr	Leu	Asn
		115					120					125			
His	Glu	His	Tyr	Glu	Cys	Lys	Tyr	Val	Ile	Asn	Ala	Ile	Pro	Pro	Thr
	130					135					140				
Leu	Thr	Ala	Lys	Ile	His	Phe	Arg	Pro	Glu	Leu	Pro	Ala	Glu	Arg	Asn
145					150				155						160
Gln	Leu	Ile	Gln	Arg	Leu	Pro	Met	Gly	Ala	Val	Ile	Lys	Cys	Met	Met
			165					170						175	
Tyr	Tyr	Lys	Glu	Ala	Phe	Trp	Lys	Lys	Lys	Asp	Tyr	Cys	Gly	Cys	Met
		180						185				190			
Ile	Ile	Glu	Asp	Glu	Asp	Ala	Pro	Ile	Ser	Ile	Thr	Leu	Asp	Asp	Thr
	195						200					205			
Lys	Pro	Asp	Gly	Ser	Leu	Pro	Ala	Ile	Met	Gly	Phe	Ile	Leu	Ala	Arg
	210					215					220				
Lys	Ala	Asp	Arg	Leu	Ala	Lys	Leu	His	Lys	Gly	Ile	Arg	Lys	Lys	Lys
225					230				235						240
Ile	Cys	Glu	Leu	Tyr	Ala	Lys	Val	Leu	Gly	Ser	Gln	Glu	Ala	Leu	His
			245						250					255	
Pro	Val	His	Tyr	Glu	Glu	Lys	Asn	Trp	Cys	Glu	Glu	Gln	Tyr	Ser	Gly
		260						265					270		
Gly	Cys	Tyr	Thr	Ala	Tyr	Phe	Pro	Pro	Gly	Ile	Met	Thr	Gln	Tyr	Gly
		275					280					285			
Arg	Val	Ile	Arg	Gln	Pro	Val	Gly	Arg	Ile	Phe	Phe	Ala	Gly	Thr	Glu
	290					295					300				
Thr	Ala	Thr	Lys	Trp	Ser	Gly	Tyr	Met	Glu	Gly	Ala	Val	Glu	Ala	Gly
305					310				315					320	
Glu	Arg	Ala	Ala	Arg	Glu	Val	Leu	Asn	Gly	Leu	Gly	Lys	Val	Thr	Glu
			325						330				335		
Lys	Asp	Ile	Trp	Val	Gln	Glu	Pro	Glu	Ser	Lys	Asp	Val	Pro	Ala	Val
		340						345					350		
Glu	Ile	Thr	His	Thr	Phe	Trp	Glu	Arg	Asn	Leu	Pro	Ser	Val	Ser	Gly
	355						360					365			
Leu	Leu	Lys	Ile	Ile	Gly	Phe	Ser	Thr	Ser	Val	Thr	Ala	Leu	Gly	Phe
	370					375					380				
Val	Leu	Tyr	Lys	Tyr	Lys	Leu	Leu	Pro	Arg	Ser					
385					390					395					

<210> 79
 <211> 45
 <212> PRT
 <213> Homo sapiens

<400> 79
 Met Gly Asn Cys Ser Leu Leu Leu Pro Thr Leu Ser Glu His Leu Trp
 1 5 10 15
 Asp Leu Val Ala Gln Asn Ser Ser Val Thr Ser Ser Ser Pro Pro Phe
 20 25 30
 Val Pro Ile Ser Ser Leu Ser Lys Lys Pro Cys Gly Thr
 35 40 45

<210> 80
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 80
 Met Trp Gly Ser Cys Val Leu Glu Tyr Tyr Val Ser Pro Pro Ser Ala
 1 5 10 15
 Val Phe Ser Glu His Val Cys Cys Pro Trp Trp Glu Arg Gly His Cys
 20 25 30
 Ala Val Val His Arg Cys Leu Ser Phe Thr Val Gly Leu Ser Val Cys
 35 40 45
 Leu Ser Phe Leu Ser Ala Ala Gln Met Glu Asn Asn Tyr Leu Leu His
 50 55 60
 Trp Arg Glu Arg Lys Ser Leu Arg Ile Pro Lys Gly Thr Leu Ala
 65 70 75

<210> 81
 <211> 36
 <212> PRT
 <213> Homo sapiens

<400> 81
 Met Cys Pro Phe Ser Ser Leu His Leu Ala Ala Gly Ile Val Asp Ile
 1 5 10 15
 Thr Gly Ala Leu Ala Ala Val Ser Arg Gly Ser Lys Pro His Pro Lys
 20 25 30
 Ser Lys Ala Asp
 35

<210> 82
 <211> 35
 <212> PRT
 <213> Homo sapiens

<400> 82
 Met Ala Leu Gly Thr Trp Lys Arg Val Thr Glu Met Gly Arg His Glu
 1 5 10 15

Leu Lys Glu Ala Ile Tyr Asp His Val Ile Cys Asn Met Lys Lys Ala
 20 25 30

Tyr Leu Glu
 35

<210> 83
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 83
 Met Glu Ala Trp Ile Arg Ala Asn Gln Pro Ala Phe Leu Val Trp Arg
 1 5 10 15

Ser Thr Trp Pro Phe Pro Trp Ala Gln Gly His Leu Lys His Cys Pro
 20 25 30

Val Lys Leu Val Leu Gly Cys Pro Cys Ala Trp Arg Val Leu Lys Leu
 35 40 45

Thr Phe Gln Ile Pro Arg Glu Gln Gly Glu Ile Ser Arg Met Ser Ile
 50 55 60

Ala Ala Lys Lys Cys Leu Gly Gly Leu Pro Leu Leu Thr Pro His Leu
 65 70 75 80

Ala Ala Asp Gln His Ser Ile Leu Asn Thr Leu Arg Ala Pro Ser Met
 85 90 95

Ala Phe Asp Arg Thr Lys Ser Pro Gly Val Val Thr Glu Asn Arg Ser
 100 105 110

Cys Ala Val Thr Ala Met Phe Pro Pro Gly Arg Gln Lys Leu Lys Ser
 115 120 125

Pro Lys Arg Thr Ser Phe Ser Ser Ala Ala Asp Glu Trp His Arg Tyr
 130 135 140

<210> 84
 <211> 369
 <212> PRT
 <213> Homo sapiens

<400> 84
 Met Pro Arg Ala Pro Lys Arg Gln Arg Cys Met Pro Glu Glu Asp Leu
 1 5 10 15

Gln Ser Gln Ser Glu Thr Gln Gly Leu Glu Gly Ala Gln Ala Pro Leu
 20 25 30

Ala Val Glu Glu Asp Ala Ser Ser Thr Ser Thr Ser Ser Ser Phe
 35 40 45

Pro Ser Ser Phe Pro Ser Ser Ser Ser Ser Ser Ser Cys Tyr
 50 55 60

Pro Leu Ile Pro Ser Thr Pro Glu Glu Val Ser Ala Asp Asp Glu Thr

65		70		75		80
Pro Asn Pro Pro Gln Ser Ala Gln Ile Ala Cys Ser Ser Pro Ser Val						
	85			90		95
Val Ala Ser Leu Pro Leu Asp Gln Ser Asp Glu Gly Ser Ser Ser Gln						
	100			105		110
Lys Glu Glu Ser Pro Ser Thr Leu Gln Val Leu Pro Asp Ser Glu Ser						
	115			120		125
Leu Pro Arg Ser Glu Ile Asp Glu Lys Val Thr Asp Leu Val Gln Phe						
	130			135		140
Leu Leu Phe Lys Tyr Gln Met Lys Glu Pro Ile Thr Lys Ala Glu Ile						
	145			150		155
Leu Glu Ser Val Ile Lys Asn Tyr Glu Asp His Phe Pro Leu Leu Phe						
	165			170		175
Ser Glu Ala Ser Glu Cys Met Leu Leu Val Phe Gly Ile Asp Val Lys						
	180			185		190
Glu Val Asp Pro Thr Gly His Ser Phe Val Leu Val Thr Ser Leu Gly						
	195			200		205
Leu Thr Tyr Asp Gly Met Leu Ser Asp Val Gln Ser Met Pro Lys Thr						
	210			215		220
Gly Ile Leu Ile Leu Ile Leu Ser Ile Ile Phe Ile Glu Gly Tyr Cys						
	225			230		235
Thr Pro Glu Glu Val Ile Trp Glu Ala Leu Asn Met Met Gly Leu Tyr						
	245			250		255
Asp Gly Met Glu His Leu Ile Tyr Gly Glu Pro Arg Lys Leu Leu Thr						
	260			265		270
Gln Asp Trp Val Gln Glu Asn Tyr Leu Glu Tyr Arg Gln Val Pro Gly						
	275			280		285
Ser Asp Pro Ala Arg Tyr Glu Phe Leu Trp Gly Pro Arg Ala His Ala						
	290			295		300
Glu Ile Arg Lys Met Ser Leu Leu Lys Phe Leu Ala Lys Val Asn Gly						
	305			310		315
Ser Asp Pro Arg Ser Phe Pro Leu Trp Tyr Glu Glu Ala Leu Lys Asp						
	325			330		335
Glu Glu Glu Arg Ala Gln Asp Arg Ile Ala Thr Thr Asp Asp Thr Thr						
	340			345		350
Ala Met Ala Ser Ala Ser Ser Ser Ala Thr Gly Ser Phe Ser Tyr Pro						
	355			360		365

Glu

<210> 85
 <211> 69
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (8)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 85
 Leu Val Ile Tyr Ser Trp His Xaa Phe Phe Ser Phe Gly Phe Ala Trp
 1 5 10 15
 Leu Phe Leu Gln Val Leu Ser Arg Tyr His Ser Ala Asn His Cys Tyr
 20 25 30
 Arg Met Val Thr Ser Phe Val Leu Thr Val Gln Gln Gln Ile Trp Val
 35 40 45
 Arg Leu Asn Leu Ser Val Asn Phe Phe Phe Trp Cys Phe Phe Gly Leu
 50 55 60
 Met Thr Val Ser Leu
 65

<210> 86
 <211> 95
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (46)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 86
 Pro Val Leu Leu Ser Leu Leu Leu Leu Gly Pro Ala Val Pro Gln
 1 5 10 15
 Glu Asn Gln Asp Gly Arg Tyr Ser Leu Thr Tyr Ile Tyr Thr Gly Leu
 20 25 30
 Ser Lys His Val Glu Asp Val Pro Ala Phe Gln Ala Leu Xaa His Ser
 35 40 45
 Met Thr Ser Ser Ser Leu Asp Thr Thr Val Lys Thr Gly Ser Leu Ser
 50 55 60
 Pro Trp Asp Ser Gly Asp Arg Trp Lys Glu Trp Arg Ile Gly Ser Arg
 65 70 75 80
 Thr Ala Asn Phe Arg Arg Pro Gly Arg Thr Ser Leu Trp Arg Pro
 85 90 95

<210> 87
 <211> 181
 <212> PRT
 <213> Homo sapiens

<400> 87
 Met Leu Gln Gln Asp Ser Asn Asp Asp Thr Glu Asp Val Ser Leu Phe
 1 5 10 15
 Asp Ala Glu Glu Glu Thr Thr Asn Arg Pro Arg Lys Ala Lys Ile Arg
 20 25 30

```

His Pro Val Ala Ser Phe Phe His Leu Phe Phe Arg Val Ser Ala Ile
   35                               40                               45

Ile Val Tyr Leu Leu Cys Glu Leu Leu Ser Ser Ser Phe Ile Thr Cys
   50                               55                               60

Met Val Thr Ile Ile Leu Leu Leu Ser Cys Asp Phe Trp Ala Val Lys
   65                               70                               75                               80

Asn Val Thr Gly Arg Leu Met Val Gly Leu Arg Trp Trp Asn His Ile
   85                               90                               95

Asp Glu Asp Gly Lys Ser His Trp Val Phe Glu Ser Arg Lys Glu Ser
  100                               105                               110

Ser Gln Glu Asn Lys Thr Val Ser Glu Ala Glu Ser Arg Ile Phe Trp
  115                               120                               125

Leu Gly Leu Ile Ala Cys Pro Val Leu Trp Val Ile Phe Ala Phe Ser
  130                               135                               140

Ala Leu Phe Ser Phe Arg Val Lys Trp Leu Ala Val Val Ile Met Gly
  145                               150                               155                               160

Val Val Leu Gln Gly Ala Asn Leu Tyr Gly Thr Ser Gly Val Arg Cys
  165                               170                               175

Ala Ala Glu Ser Ile
  180

```

<210> 88

<211> 61

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (54)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 88

```

Leu Cys Leu Gln Gly Tyr Tyr Arg Gly Ala Val Gly Ala Leu Leu Val
  1                               5                               10                               15

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```

Phe Asp Leu Thr Lys His Gln Thr Tyr Ala Val Val Glu Arg Trp Leu
  20                               25                               30

```

```

Lys Glu Leu Tyr Asp His Xaa Glu Ala Thr Ile Val Val Met Leu Val
  35                               40                               45

```

```

Gly Asn Lys Met Thr Xaa Ala Arg Pro Gly Lys Cys Pro
  50                               55                               60

```

<210> 89

<211> 217

<212> PRT

<213> Homo sapiens

<220>
 <221> SITE
 <222> (3)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 89

```

Met Arg Xaa Lys Met Gly Asn Gly Thr Glu Glu Asp Tyr Asn Phe Val
 1           5           10           15

Phe Lys Val Val Leu Ile Gly Glu Ser Gly Val Gly Lys Thr Asn Leu
      20           25           30

Leu Ser Arg Phe Thr Arg Asn Glu Phe Ser His Asp Ser Arg Thr Thr
      35           40           45

Ile Gly Val Glu Phe Ser Thr Arg Thr Val Met Leu Gly Thr Ala Ala
 50           55           60

Val Lys Ala Gln Ile Trp Asp Thr Ala Gly Leu Glu Arg Tyr Arg Ala
 65           70           75           80

Ile Thr Ser Ala Tyr Thr Arg Gly Ala Val Gly Ala Leu Leu Val Phe
      85           90           95

Asp Leu Thr Lys His Gln Thr Tyr Ala Val Val Glu Arg Trp Leu Lys
      100          105          110

Glu Leu Tyr Asp His Ala Glu Ala Thr Ile Val Val Met Leu Val Gly
      115          120          125

Asn Lys Ser Asp Leu Ser Gln Ala Arg Glu Val Pro Thr Glu Glu Ala
      130          135          140

Arg Met Phe Ala Glu Asn Asn Gly Leu Leu Phe Leu Glu Thr Ser Ala
      145          150          155          160

Leu Asp Ser Thr Asn Val Glu Leu Ala Phe Glu Thr Val Leu Lys Glu
      165          170          175

Ile Phe Ala Lys Val Ser Lys Gln Arg Gln Asn Ser Ile Arg Thr Asn
      180          185          190

Ala Ile Thr Ser Gly Ser Ala Gln Ala Gly Gln Glu Pro Gly Pro Gly
      195          200          205

Glu Lys Arg Ala Cys Cys Ile Ser Leu
      210          215

```

<210> 90
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 90

```

Met Leu Gly Asn Lys Arg Leu Gly Leu Ser Gly Leu Thr Ser Pro Cys
 1           5           10           15

Pro Cys Ser Cys Ala Trp Val Arg Trp Pro Arg Arg Thr Pro Pro Ser
      20           25           30

Arg Thr Thr Arg Ala Arg Thr His Gln Arg Arg Thr Trp Pro Asp Thr
      35           40           45

```

Thr Gln Arg Cys Asp Thr Thr Ser Thr Ser Ser Pro Gly Arg Asp Met
 50 55 60

Glu Asn Asp Leu Ala Gln Arg His
 65 70

<210> 91

<211> 91

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (32)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 91

Met Leu Gly Asn Lys Arg Leu Gly Leu Ser Gly Leu Thr Leu Ala Leu
 1 5 10 15

Ser Leu Leu Val Cys Leu Gly Ala Leu Ala Glu Ala Tyr Pro Ser Xaa
 20 25 30

Pro Asp Asn Pro Gly Glu Asp Ala Pro Xaa Glu Gly His Gly Gln Ile
 35 40 45

Leu Leu Xaa Ala Ala Thr Leu His Gln Pro His His Gln Ala Glu Ile
 50 55 60

Trp Lys Thr Ile Xaa Pro Arg Asp Thr Asp Phe Arg Pro Leu Asp Glu
 65 70 75 80

Arg Lys His Arg Lys Cys Ser Gln Asn Ser Ala
 85 90

<210> 92

<211> 277

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (147)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 92

Met Gln Gly Ser Thr Arg Arg Met Gly Val Met Thr Asp Val His Arg

1	5	10	15
Arg Phe Leu Gln Leu Leu Met Thr His Gly Val Leu Glu Glu Trp Asp	20	25	30
Val Lys Arg Leu Gln Thr His Cys Tyr Lys Val His Asp Arg Asn Ala	35	40	45
Thr Val Asp Lys Leu Glu Asp Phe Ile Asn Asn Ile Asn Ser Val Leu	50	55	60
Glu Ser Leu Tyr Ile Glu Ile Lys Arg Gly Val Thr Glu Asp Asp Gly	65	70	75
Arg Pro Ile Tyr Ala Leu Val Asn Leu Ala Thr Thr Ser Ile Ser Lys	85	90	95
Met Ala Thr Asp Phe Ala Glu Asn Glu Leu Asp Leu Phe Arg Lys Ala	100	105	110
Leu Glu Leu Ile Ile Asp Ser Glu Thr Gly Phe Ala Ser Ser Thr Asn	115	120	125
Ile Leu Asn Leu Val Asp Gln Leu Lys Gly Lys Lys Met Arg Lys Lys	130	135	140
Glu Ala Xaa Gln Val Leu Gln Lys Phe Val Gln Asn Lys Trp Leu Ile	145	150	155
Glu Lys Glu Gly Glu Phe Thr Leu His Gly Arg Ala Ile Leu Glu Met	165	170	175
Glu Gln Tyr Ile Arg Glu Thr Tyr Pro Asp Ala Val Lys Ile Cys Asn	180	185	190
Ile Cys His Ser Leu Leu Ile Gln Gly Gln Ser Cys Glu Thr Cys Gly	195	200	205
Ile Arg Met His Leu Pro Cys Val Ala Lys Tyr Phe Gln Ser Asn Ala	210	215	220
Glu Pro Arg Cys Pro His Cys Asn Asp Tyr Trp Pro His Glu Ile Pro	225	230	235
Lys Val Phe Asp Pro Glu Lys Glu Arg Glu Ser Gly Val Leu Lys Ser	245	250	255
Asn Lys Lys Ser Cys Gly Pro Gly Ser Ile Ser His Arg Ala Leu Leu	260	265	270
Arg Gly Trp Leu Pro	275		

<210> 93
 <211> 122
 <212> PRT
 <213> Homo sapiens

 <220>
 <221> SITE
 <222> (16)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 93

```

Phe Leu His Thr Phe Asn Cys Ser Trp Ser Leu Thr Ser Pro Gly Xaa
 1           5           10          15
Arg Asp Val Leu Lys Gly Ser Gln Leu Trp Gln Val Thr Asp Ser Trp
          20          25          30
Glu Met Glu Arg Thr Lys Glu Tyr Ser Ser Cys Leu Thr Phe Leu Pro
          35          40          45
Thr Ala Asp Ile Val Gln Ala Arg Val Met Glu Glu Leu Asn Leu Leu
          50          55          60
Ala Ser Gln Ala Ala Pro Ile Pro Thr Ser Gln Cys Thr Ala Pro Pro
          65          70          75          80
His Leu Phe Ser Pro Leu Ser Leu Thr Ser Pro Phe Ile Met Ser His
          85          90          95
Lys Ser Gly Thr Val Gly Ser His Tyr Asn Leu Leu Cys His Arg Asp
          100          105          110
Ser Ile Phe Leu Ile Ser Asn His Val Ser
          115          120

<210> 94
<211> 341
<212> PRT
<213> Homo sapiens

<400> 94
Arg Thr Asn Leu Lys Glu Ala Ser Asp Ile Lys Leu Glu Pro Asn Thr
 1           5           10          15
Leu Asn Gly Tyr Lys Ser Ser Val Thr Glu Pro Cys Pro Asp Ser Gly
          20          25          30
Glu Gln Leu Gln Pro Ala Pro Val Leu Gln Glu Glu Leu Ala His
          35          40          45
Glu Thr Ala Gln Lys Gly Glu Ala Lys Cys His Lys Ser Asp Thr Gly
          50          55          60
Met Ser Lys Lys Lys Ser Arg Gln Gly Lys Leu Val Lys Gln Phe Ala
          65          70          75          80
Lys Ile Glu Glu Ser Thr Pro Val His Asp Ser Pro Gly Lys Asp Asp
          85          90          95
Ala Val Pro Asp Leu Met Gly Pro His Ser Asp Gln Gly Glu His Ser
          100          105          110
Gly Thr Val Gly Val Pro Val Ser Tyr Thr Asp Cys Ala Pro Ser Pro
          115          120          125
Val Gly Cys Ser Val Val Thr Ser Asp Ser Phe Arg Thr Lys Asp Ser
          130          135          140
Phe Arg Thr Ala Lys Ser Lys Lys Lys Arg Arg Ile Thr Arg Tyr Asp
          145          150          155          160
Ala Gln Leu Ile Leu Glu Asn Asn Ser Gly Ile Pro Lys Leu Thr Leu
          165          170          175
Arg Arg Arg His Asp Ser Ser Ser Lys Thr Asn Asp Gln Glu Asn Asp

```

```

180              185              190
Gly Met Asn Ser Ser Lys Ile Ser Ile Lys Leu Ser Lys Asp His Asp
      195              200              205
Asn Asp Asn Asn Leu Tyr Val Ala Lys Leu Asn Asn Gly Phe Asn Ser
      210              215              220
Gly Ser Gly Ser Ser Ser Thr Lys Leu Lys Ile Gln Leu Lys Arg Asp
      225              230              235
Glu Glu Asn Arg Gly Ser Tyr Thr Glu Gly Leu His Glu Asn Gly Val
      245              250              255
Cys Cys Ser Asp Pro Leu Ser Leu Leu Glu Ser Arg Met Glu Val Asp
      260              265              270
Asp Tyr Ser Gln Tyr Glu Glu Glu Ser Thr Asp Asp Ser Ser Ser Ser
      275              280              285
Glu Gly Asp Glu Glu Glu Asp Tyr Asp Asp Asp Phe Glu Asp Asp
      290              295              300
Phe Ile Pro Leu Pro Pro Ala Lys Arg Leu Arg Leu Ile Val Gly Lys
      305              310              315
Asp Ser Ile Asp Ile Asp Ile Ser Ser Arg Arg Glu Asp Gln Ser
      325              330              335
Leu Arg Leu Asn Ala
      340

<210> 95
<211> 197
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (179)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (189)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (190)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 95
Met Gln Phe Ala Trp Gln Ser Tyr Lys Arg Tyr Ala Met Gly Lys Asn
  1              5              10              15
Glu Leu Arg Pro Leu Thr Lys Asp Gly Tyr Glu Gly Asn Met Phe Gly
      20              25              30
Gly Leu Ser Gly Ala Thr Val Ile Asp Ser Leu Asp Thr Leu Tyr Leu
      35              40              45
Met Glu Leu Lys Glu Glu Phe Gln Glu Ala Lys Ala Trp Val Gly Glu
      50              55              60

```

```

Ser Phe His Leu Asn Val Ser Gly Glu Ala Ser Leu Phe Glu Val Asn
 65              70              75              80

Ile Arg Tyr Ile Gly Gly Leu Leu Ser Ala Phe Tyr Leu Thr Gly Glu
      85              90              95

Glu Val Phe Arg Ile Lys Ala Ile Arg Leu Gly Glu Lys Leu Leu Pro
 100              105              110

Ala Phe Asn Thr Pro Thr Gly Ile Pro Lys Gly Val Val Ser Phe Lys
 115              120              125

Ser Gly Asn Trp Gly Trp Ala Thr Ala Gly Ser Ser Ile Leu Ala
 130              135              140

Glu Phe Gly Ser Leu His Leu Glu Phe Leu His Leu Thr Glu Leu Ser
 145              150              155              160

Gly Asn Gln Val Phe Ala Glu Lys Val Arg Asn Ile Arg Lys Val Leu
      165              170              175

Arg Lys Xaa Glu Lys Pro Phe Gly Leu Tyr Ser Asn Xaa Xaa Met Val
 180              185              190

Leu Gln Thr Asp Pro
 195

```

```

<210> 96
<211> 254
<212> PRT
<213> Homo sapiens

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<220>
<221> SITE
<222> (162)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (170)
<223> Xaa equals any of the naturally occurring L-amino acids

```

```

<400> 96
Phe Gly Thr Ser Tyr Ile Gly Gly Leu Leu Ser Ala Phe Tyr Leu Thr
 1              5              10              15

Gly Glu Glu Val Phe Arg Ile Lys Ala Ile Arg Leu Gly Glu Lys Leu
      20              25              30

Leu Pro Ala Phe Asn Thr Pro Thr Gly Ile Pro Lys Gly Val Val Ser
 35              40              45

Phe Lys Ser Gly Asn Trp Gly Trp Ala Thr Ala Gly Ser Ser Ser Ile
 50              55              60

Leu Ala Glu Phe Gly Ser Leu His Leu Glu Phe Leu His Leu Thr Glu
 65              70              75              80

Leu Ser Gly Asn Gln Val Phe Ala Glu Lys Val Arg Asn Ile Arg Lys
      85              90              95

Val Leu Arg Lys Ile Glu Lys Pro Phe Gly Leu Tyr Pro Asn Phe Leu
 100              105              110

```

Ser Pro Val Ser Gly Asn Trp Val Gln His His Val Ser Val Gly Gly
115 120 125

Leu Gly Asp Ser Phe Tyr Glu Tyr Leu Ile Lys Ser Trp Leu Met Ser
130 135 140

Gly Lys Thr Asp Met Glu Ala Lys Asn Met Tyr Tyr Glu Ala Leu Glu
145 150 155 160

Ala Xaa Arg Asp Leu Leu Ala Glu Cys Xaa Ser Arg Gly Ala Asp Leu
165 170 175

His Cys Arg Val Ala Arg Gly Asp Ser Gly Pro Gln Asp Gly Ala Pro
180 185 190

Gly Leu Phe Leu Arg Gly His Asp Arg Pro Trp Pro Glu Asp Ala Lys
195 200 205

Glu Glu Lys Arg Ala His Tyr Arg Glu Leu Ala Ala Gln Ile Thr Lys
210 215 220

Thr Cys His Glu Ser Tyr Ala Arg Ser Asp Thr Lys Leu Gly Pro Glu
225 230 235 240

Ala Ser Gly Leu Thr Pro Ala Glu Arg Pro Trp Pro Pro Ser
245 250

<210> 97

<211> 97

<212> PRT

<213> Homo sapiens

<400> 97

Met Thr Phe Gln Phe Asn Phe Thr Ile Glu Asp His Leu Glu Asn Glu
1 5 10 15

Leu Thr Pro Ile Arg Asp Gly Ala Leu Thr Leu Asp Ser Ser Lys Glu
20 25 30

Leu Ser Val Ser Glu Ser Gln Lys Gly Glu Glu Arg Asp Arg Lys Cys
35 40 45

Ser Ala Glu Gln Phe Asp Leu Pro Gln Asp His Leu Trp Glu His Lys
50 55 60

Ser Met Glu Asn Ala Ala Pro Ser Gln Asp Thr Asp Ser Pro Leu Ser
65 70 75 80

Ala Ala Ser Ser Ser Arg Asn Leu Gly Ala Thr Trp Glu Asn Ser Pro
85 90 95

Pro

<210> 98

<211> 288

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (277)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 98

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Pro His Arg Val Asp Thr Arg Arg Arg Asp Pro Val Pro Arg Ser Arg
 1          5          10          15
Ala Leu Ser His Gly Thr Gly Arg Val Gly Ala Ala Ala Gly Glu Ser
          20          25          30
Ser Arg Ala Pro Arg Cys Trp Ser Gly Ser Arg Pro Arg Ala Pro Ala
 35          40          45
Asp Pro Pro Arg His Arg Pro Leu Leu Cys Leu Ser Arg Arg Gly Ser
 50          55          60
Pro Pro His His Leu Gly Cys Leu Leu Gly Glu Ser Phe Met Gln Leu
 65          70          75
Gln Gln Arg Leu Leu Arg Glu Lys Glu Ala Lys Ile Arg Lys Ala Leu
          85          90          95
Asp Arg Leu Arg Lys Lys Arg His Leu Leu Arg Arg Gln Arg Thr Arg
100          105          110
Arg Glu Phe Pro Val Ile Ser Val Val Gly Tyr Thr Asn Cys Gly Lys
115          120          125
Thr Thr Leu Ile Lys Ala Leu Thr Gly Asp Ala Ala Ile Gln Pro Arg
130          135          140
Asp Gln Leu Phe Ala Thr Leu Asp Val Thr Ala His Ala Gly Thr Leu
145          150          155          160
Pro Ser Arg Met Thr Val Leu Tyr Val Asp Thr Ile Gly Phe Leu Ser
165          170          175
Gln Leu Pro His Gly Leu Ile Glu Ser Phe Ser Ala Thr Leu Glu Asp
180          185          190
Val Ala His Ser Asp Leu Ile Leu His Val Arg Asp Val Ser His Pro
195          200          205
Glu Ala Glu Leu Gln Lys Cys Ser Val Leu Ser Thr Leu Arg Gly Leu
210          215          220
Gln Leu Pro Ala Pro Leu Leu Asp Ser Met Val Glu Val His Asn Lys
225          230          235          240
Val Asp Leu Val Pro Gly Tyr Ser Pro Thr Glu Pro Asn Val Val Pro
245          250          255
Val Ser Ala Leu Arg Gly His Gly Leu Gln Glu Leu Lys Leu Ser Ser
260          265          270
Met Arg Arg Phe Xaa Arg Arg Arg Gly Asp Arg Ser Ser Leu Ser Val
275          280          285

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<210> 99

<211> 94

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (61)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (63)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 99

Pro Pro Pro Ile Gly Leu Ala Leu Ala Cys Lys Ser Arg Arg Trp Pro
1 5 10 15

Arg Ala Gln Pro Ser Arg Met Ser Pro Gly Pro Pro Leu Trp Glu Arg
20 25 30

Arg Gln Ser Tyr Trp Pro Leu Thr Arg Pro Leu Gly Pro Arg Ala Arg
35 40 45

Gln Ala Phe Glu Ser Thr Cys Ser Ser Pro Glu Ser Xaa Pro Xaa Arg
50 55 60

Ala Ser His Thr Ala Ala Asp Leu Arg Ala Pro Cys Leu Asn Cys Glu
65 70 75 80

Phe Phe Leu Gly Asn Pro Leu Lys Arg Lys Gly Tyr Gln Ser
85 90

<210> 100

<211> 38

<212> PRT

<213> Homo sapiens

<400> 100

Met Leu Cys Trp Phe Cys Phe Phe Val Leu Leu Phe Phe Phe Phe
1 5 10 15

Leu Phe Cys Phe Leu Val Met Trp Leu Lys Cys Asn Ser Phe Phe Leu
20 25 30

Gly His Ile Ser Ala Asn
35

<210> 101

<211> 60

<212> PRT

<213> Homo sapiens

<400> 101

Met Lys Thr Gly Gly Lys His Ser Val Ile Arg Tyr Phe Ser Asn Ile
1 5 10 15

Lys Thr Thr Lys Thr Asn Asp Lys Asn Val Tyr Phe Tyr Thr Pro Ala
20 25 30

Tyr Arg Val Ser Phe Arg Asp Val Tyr Glu Tyr Leu Asn Leu Leu Ile
35 40 45

Ser Val Leu Met Lys Ala Glu Leu Asn Arg Glu Ser

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<210> 102
 <211> 40
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (6)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (30)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 102
 Trp Met Ser Glu Tyr Xaa Gln Trp Val Phe Leu Ile Ser Leu Arg Ile
 1 5 10 15
 Cys Leu Arg Val His Tyr Gln Gly Ile Ser Gly Thr Arg Xaa His Ser
 20 25 30
 Leu His Gln Phe Leu Arg Val Leu
 35 40

<210> 103
 <211> 228
 <212> PRT
 <213> Homo sapiens

<400> 103
 Met Gly Ala Val Ile Lys Cys Met Met Tyr Tyr Lys Glu Ala Phe Trp
 1 5 10 15
 Lys Lys Lys Asp Tyr Cys Gly Cys Met Ile Ile Glu Asp Glu Asp Ala
 20 25 30
 Pro Ile Ser Ile Thr Leu Asp Asp Thr Lys Pro Asp Gly Ser Leu Pro
 35 40 45
 Ala Ile Met Gly Phe Ile Leu Ala Arg Lys Ala Asp Arg Leu Ala Lys
 50 55 60
 Leu His Lys Glu Ile Arg Lys Lys Lys Ile Cys Glu Leu Tyr Ala Lys
 65 70 75 80
 Val Leu Gly Ser Gln Glu Ala Leu His Pro Val His Tyr Glu Glu Lys
 85 90 95
 Asn Trp Cys Glu Glu Gln Tyr Ser Gly Gly Cys Tyr Thr Ala Tyr Phe
 100 105 110
 Pro Pro Gly Ile Met Thr Gln Tyr Gly Arg Val Ile Arg Gln Pro Val
 115 120 125
 Gly Arg Ile Phe Phe Ala Gly Thr Glu Thr Ala Thr Lys Trp Ser Gly
 130 135 140
 Tyr Met Glu Gly Ala Val Glu Ala Gly Glu Arg Ala Ala Arg Glu Val
 145 150 155 160

Leu Asn Gly Leu Gly Lys Val Thr Glu Lys Asp Ile Trp Val Gln Glu
 165 170
 Pro Glu Ser Lys Asp Val Pro Ala Val Glu Ile Thr His Thr Phe Trp
 180 185 190
 Glu Arg Asn Leu Pro Ser Val Ser Gly Leu Leu Lys Ile Ile Gly Phe
 195 200 205
 Ser Thr Ser Val Thr Ala Leu Gly Phe Val Leu Tyr Lys Tyr Lys Leu
 210 215 220
 Leu Pro Arg Ser
 225

<210> 104
 <211> 82
 <212> PRT
 <213> Homo sapiens
 <400> 104
 Phe Phe Val Ile Pro Ser Ser Gly Ser Ile Cys Phe Cys Ser Leu Val
 1 5 10 15
 Thr Val Leu Met Phe Asn Cys Cys Thr Leu Lys Pro Lys Ser Val Thr
 20 25 30
 Met His Thr Val Thr Lys Val Leu Gly Leu Gln Ser Cys Leu Leu Tyr
 35 40 45
 Lys Glu Asn Phe Lys Cys Cys Cys Lys Leu Thr Ser Tyr Thr Ile Leu
 50 55 60
 Asn Phe Leu Ser Ser Pro Leu Phe Leu Pro Thr Asn Gly Ile Ile Met
 65 70 75 80
 Leu Ala

<210> 105
 <211> 79
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (6)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 105
 Met Trp Gly Ser Cys Xaa Leu Glu Tyr Tyr Val Ser Pro Pro Ser Ala
 1 5 10 15
 Val Phe Ser Glu His Val Cys Cys Pro Trp Trp Glu Arg Gly His Cys
 20 25 30
 Ala Val Val His Arg Cys Leu Ser Phe Thr Val Gly Leu Ser Val Cys
 35 40 45
 Leu Ser Phe Leu Ser Ala Ala Gln Met Glu Asn Asn Tyr Leu Leu His
 50 55 60

Trp Arg Glu Arg Lys Ser Leu Arg Ile Pro Lys Gly Thr Leu Ala
 65 70 75

<210> 106
 <211> 36
 <212> PRT
 <213> Homo sapiens

<400> 106
 Met Cys Pro Phe Ser Ser Leu His Leu Ala Ala Gly Ile Val Asp Ile
 1 5 10 15
 Thr Gly Ala Leu Ala Ala Val Ser Arg Gly Ser Lys Pro His Pro Lys
 20 25 30

Ser Lys Ala Asp
 35

<210> 107
 <211> 35
 <212> PRT
 <213> Homo sapiens

<400> 107
 Met Ala Leu Gly Thr Trp Lys Arg Val Thr Glu Met Gly Arg His Glu
 1 5 10 15
 Leu Lys Glu Ala Ile Tyr Asp His Val Ile Cys Asn Met Lys Lys Ala
 20 25 30
 Tyr Leu Glu
 35

<210> 108
 <211> 43
 <212> PRT
 <213> Homo sapiens

<400> 108
 Ile Val Thr Lys Leu Lys Arg Leu Cys Cys Phe Ser Val Met Ser Ala
 1 5 10 15
 Gly Ile Lys Ala Val Ser Ala Pro Cys Gly Ala Ser Cys Gly Ile Cys
 20 25 30
 Ser Ser Pro Tyr Pro His Asn Ser Gly Ala Gln
 35 40

<210> 109
 <211> 74
 <212> PRT
 <213> Homo sapiens

<400> 109
 Arg Pro Thr Arg Pro Pro Cys His Ile Leu Leu Ala Tyr Leu Phe Phe
 1 5 10 15

Leu Trp Leu Cys Met Ala Phe Leu Gln Val Leu Ser Arg Tyr His Ser
20 25 30

Ala Asn His Cys Tyr Arg Met Val Thr Ser Phe Val Leu Thr Val Gln
35 40 45

Gln Gln Ile Trp Val Arg Leu Asn Leu Ser Val Asn Phe Phe Phe Trp
50 55 60

Cys Phe Phe Gly Leu Met Thr Val Ser Leu
65 70

<210> 110

<211> 7

<212> PRT

<213> Homo sapiens

<400> 110

Trp Cys Phe Phe Gly Leu Met
1 5

<210> 111

<211> 7

<212> PRT

<213> Homo sapiens

<400> 111

Phe Phe Gly Leu Met Thr Val
1 5

<210> 112

<211> 9

<212> PRT

<213> Homo sapiens

<400> 112

Trp Cys Phe Phe Gly Leu Met Thr Val
1 5

<210> 113

<211> 69

<212> PRT

<213> Homo sapiens

<400> 113

Phe Leu Gln Val Leu Ser Arg Tyr His Ser Ala Asn His Cys Tyr Arg
1 5 10 15

Met Val Thr Ser Phe Val Leu Thr Val Gln Gln Gln Ile Trp Val Arg
20 25 30

Leu Asn Leu Ser Val Asn Phe Phe Phe Trp Cys Phe Phe Gly Leu Met
35 40 45

Thr Val Ser Leu Leu Tyr Pro Cys Phe Ala Cys Asn Asp Ser Cys Met
50 55 60

Val Phe Leu Thr Ser

65

<210> 114

<211> 167

<212> PRT

<213> Homo sapiens

<400> 114

Ser Trp Gln Thr Glu Glu Lys Thr Cys Asp Leu Val Gly Glu Lys Gly
 1 5 10 15

Lys Glu Ser Glu Lys Glu Leu Ala Leu Val Lys Arg Leu Lys Pro Leu
 20 25 30

Phe Asn Lys Ser Phe Glu Ser Thr Val Gly Gln Gly Ser Asp Thr Tyr
 35 40 45

Ile Tyr Ile Phe Arg Val Cys Arg Glu Ala Gly Asn His Thr Ser Gly
 50 55 60

Ala Gly Leu Val Gln Ile Asn Lys Ser Asn Gly Lys Glu Thr Val Val
 65 70 75 80

Gly Arg Leu Asn Glu Thr His Ile Phe Asn Gly Ser Asn Trp Ile Met
 85 90 95

Leu Ile Tyr Lys Gly Gly Asp Glu Tyr Asp Asn His Cys Gly Lys Glu
 100 105 110

Gln Arg Arg Ala Val Val Met Ile Ser Cys Asn Arg His Thr Leu Ala
 115 120 125

Asp Asn Phe Asn Pro Val Ser Glu Glu Arg Gly Lys Val Gln Asp Cys
 130 135 140

Phe Tyr Leu Phe Glu Met Asp Ser Ser Leu Ala Cys Ser Pro Glu Ile
 145 150 155 160

Ser His Leu Ser Val Gly Ser
 165

<210> 115

<211> 32

<212> PRT

<213> Homo sapiens

<400> 115

Ser Trp Gln Thr Glu Glu Lys Thr Cys Asp Leu Val Gly Glu Lys Gly
 1 5 10 15

Lys Glu Ser Glu Lys Glu Leu Ala Leu Val Lys Arg Leu Lys Pro Leu
 20 25 30

<210> 116

<211> 32

<212> PRT

<213> Homo sapiens

<400> 116

Phe Asn Lys Ser Phe Glu Ser Thr Val Gly Gln Gly Ser Asp Thr Tyr
 1 5 10 15
 Ile Tyr Ile Phe Arg Val Cys Arg Glu Ala Gly Asn His Thr Ser Gly
 20 25 30

<210> 117

<211> 32

<212> PRT

<213> Homo sapiens

<400> 117

Ala Gly Leu Val Gln Ile Asn Lys Ser Asn Gly Lys Glu Thr Val Val
 1 5 10 15
 Gly Arg Leu Asn Glu Thr His Ile Phe Asn Gly Ser Asn Trp Ile Met
 20 25 30

<210> 118

<211> 32

<212> PRT

<213> Homo sapiens

<400> 118

Leu Ile Tyr Lys Gly Gly Asp Glu Tyr Asp Asn His Cys Gly Lys Glu
 1 5 10 15
 Gln Arg Arg Ala Val Val Met Ile Ser Cys Asn Arg His Thr Leu Ala
 20 25 30

<210> 119

<211> 39

<212> PRT

<213> Homo sapiens

<400> 119

Asp Asn Phe Asn Pro Val Ser Glu Glu Arg Gly Lys Val Gln Asp Cys
 1 5 10 15
 Phe Tyr Leu Phe Glu Met Asp Ser Ser Leu Ala Cys Ser Pro Glu Ile
 20 25 30
 Ser His Leu Ser Val Gly Ser
 35

<210> 120

<211> 7

<212> PRT
 <213> Homo sapiens

<400> 120
 Tyr Ser Cys His Val Gln His
 1 5

<210> 121
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 121
 Pro Tyr Ser Cys His Val Gln His Ser
 1 5

<210> 122
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 122
 Ala Pro Tyr Ser Cys His Val Gln His Ser Ser
 1 5 10

<210> 123
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 123
 Ser Cys Asp Phe Trp Ala Val Lys Asn Val Thr Gly Arg Leu Met Val
 1 5 10 15

Gly Leu Arg Trp Trp Asn His Ile Asp Glu Asp Gly Lys Ser His Trp
 20 25 30

Val Phe Glu Ser Arg Lys Glu Ser Ser Gln Glu Asn Lys Thr Val Ser
 35 40 45

Glu Ala Glu Ser Arg Ile Phe Trp Leu Gly
 50 55

<210> 124
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 124
 Gly Glu Ser Gly Val Gly Lys Thr
 1 5

<210> 125
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 125
 Ile Gly Glu Ser Gly Val Gly Lys Thr
 1 5

<210> 126
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 126
 Gly Glu Ser Gly Val Gly Lys Thr Asn
 1 5

<210> 127
 <211> 15
 <212> PRT
 <213> Homo sapiens
 <400> 127
 Val Val Leu Ile Gly Glu Ser Gly Val Gly Lys Thr Asn Leu Leu
 1 5 10 15

<210> 128
 <211> 46
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (34)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 128
 Tyr Tyr Arg Gly Ala Val Gly Ala Leu Leu Val Phe Asp Leu Thr Lys
 1 5 10 15
 His Gln Thr Tyr Ala Val Val Glu Arg Trp Leu Lys Glu Leu Tyr Asp
 20 25 30
 His Xaa Glu Ala Thr Ile Val Val Met Leu Val Gly Asn Lys
 35 40 45

<210> 129
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 129
 Tyr Tyr Ser Ala Leu Arg His Tyr Ile Asn Leu Ile Thr Arg Gln Arg
 1 5 10 15

Tyr

<210> 130

<211> 288

<212> PRT

<213> Homo sapiens

<400> 130

Thr Arg Pro Arg Val His Leu Ala Thr Val Ser Ala Ser Ala Ala Trp
 1 5 10 15

Asp Ala Leu Gly Leu Pro Val Arg Ser His Met Gln Gly Ser Thr Arg
 20 25 30

Arg Met Gly Val Met Thr Asp Val His Arg Arg Phe Leu Gln Leu Leu
 35 40 45

Met Thr His Gly Val Leu Glu Trp Asp Val Lys Arg Leu Gln Thr
 50 55 60

His Cys Tyr Lys Val Asp Arg Asn Ala Thr Val Asp Lys Leu Glu Asp
 65 70 75 80

Phe Ile Asn Asn Ile Asn Ser Val Leu Glu Ser Leu Tyr Ile Glu Ile
 85 90 95

Lys Arg Gly Val Thr Glu Asp Asp Gly Arg Pro Ile Tyr Ala Leu Val
 100 105 110

Asn Leu Ala Thr Thr Ser Ile Ser Lys Met Ala Thr Asp Phe Ala Glu
 115 120 125

Asn Glu Leu Asp Leu Phe Arg Lys Ala Leu Leu Ile Ile Asp Ser Glu
 130 135 140

Thr Gly Phe Ala Ser Ser Thr Asn Ile Leu Asn Leu Val Asp Gln Leu
 145 150 155 160

Lys Gly Lys Lys Met Arg Lys Lys Glu Ala Glu Gln Val Leu Gln Lys
 165 170 175

Phe Val Gln Asn Lys Trp Leu Ile Glu Lys Glu Gly Glu Phe Thr Leu
 180 185 190

His Gly Arg Ala Ile Leu Glu Met Glu Gln Tyr Ile Arg Glu Thr Pro
 195 200 205

Asp Ala Val Lys Ile Cys Asn Ile Cys His Ser Leu Leu Ile Gln Gly
 210 215 220

Gln Ser Cys Glu Thr Cys Gly Ile Arg Met His Leu Pro Cys Val Ala
 225 230 235 240

Lys Tyr Phe Gln Ser Asn Ala Glu Pro Arg Cys Pro His Cys Asn Asp
 245 250 255

Tyr Trp Pro His Glu Ile Pro Lys Val Phe Asp Pro Glu Lys Glu Arg
 260 265 270

Glu Ser Gly Val Lys Ser Asn Lys Lys Ser Leu Arg Ser Arg Gln His
 275 280 285

<210> 131

<211> 7

<212> PRT
 <213> Homo sapiens

<400> 131
 Cys Asn Ile Cys His Ser Leu
 1 5

<210> 132
 <211> 7
 <212> PRT
 <213> Homo sapiens

<400> 132
 Ile Cys Asn Ile Cys His Ser
 1 5

<210> 133
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 133
 Ile Cys Asn Ile Cys His Ser Leu
 1 5

<210> 134
 <211> 277
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (147)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 134
 Met Gln Gly Ser Thr Arg Arg Met Gly Val Met Thr Asp Val His Arg
 1 5 10 15
 Arg Phe Leu Gln Leu Leu Met Thr His Gly Val Leu Glu Glu Trp Asp
 20 25 30
 Val Lys Arg Leu Gln Thr His Cys Tyr Lys Val His Asp Arg Asn Ala
 35 40 45
 Thr Val Asp Lys Leu Glu Asp Phe Ile Asn Asn Ile Asn Ser Val Leu
 50 55 60
 Glu Ser Leu Tyr Ile Glu Ile Lys Arg Gly Val Thr Glu Asp Asp Gly
 65 70 75 80
 Arg Pro Ile Tyr Ala Leu Val Asn Leu Ala Thr Thr Ser Ile Ser Lys
 85 90 95
 Met Ala Thr Asp Phe Ala Glu Asn Glu Leu Asp Leu Phe Arg Lys Ala
 100 105 110
 Leu Glu Leu Ile Ile Asp Ser Glu Thr Gly Phe Ala Ser Ser Thr Asn
 115 120 125

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Ile Leu Asn Leu Val Asp Gln Leu Lys Gly Lys Lys Met Arg Lys Lys
 130 135 140
 Glu Ala Xaa Gln Val Leu Gln Lys Phe Val Gln Asn Lys Trp Leu Ile
 145 150 155 160
 Glu Lys Glu Gly Glu Phe Thr Leu His Gly Arg Ala Ile Leu Glu Met
 165 170 175
 Glu Gln Tyr Ile Arg Glu Thr Tyr Pro Asp Ala Val Lys Ile Cys Asn
 180 185 190
 Ile Cys His Ser Leu Leu Ile Gln Gly Gln Ser Cys Glu Thr Cys Gly
 195 200 205
 Ile Arg Met His Leu Pro Cys Val Ala Lys Tyr Phe Gln Ser Asn Ala
 210 215 220
 Glu Pro Arg Cys Pro His Cys Asn Asp Tyr Trp Pro His Glu Ile Pro
 225 230 235 240
 Lys Val Phe Asp Pro Glu Lys Glu Arg Glu Ser Gly Val Leu Lys Ser
 245 250 255
 Asn Lys Lys Ser Cys Gly Pro Gly Ser Ile Ser His Arg Ala Leu Leu
 260 265 270
 Arg Gly Trp Leu Pro
 275
 <210> 135
 <211> 153
 <212> PRT
 <213> Homo sapiens
 <400> 135
 Ile Asn Lys Gln Met Asn Tyr Leu Phe Phe Phe Leu Thr Thr Ser Gly
 1 5 10 15
 Leu Tyr Cys Leu Ser Gly Ser His Gly Ser Asn Val Lys Tyr Ile Val
 20 25 30
 Leu Thr Tyr Phe Asn Cys Ser Trp Ser Leu Thr Ser Pro Gly Phe Arg
 35 40 45
 Asp Val Leu Lys Gly Ser Gln Leu Trp Gln Val Thr Asp Ser Trp Glu
 50 55 60
 Met Glu Arg Thr Lys Glu Tyr Ser Ser Cys Leu Thr Phe Leu Pro Thr
 65 70 75 80
 Ala Asp Ile Val Gln Ala Arg Val Met Glu Glu Leu Asn Leu Leu Ala
 85 90 95
 Ser Gln Ala Ala Pro Ile Pro Thr Ser Gln Cys Thr Ala Pro Pro His
 100 105 110
 Leu Phe Ser Pro Leu Ser Leu Thr Ser Pro Phe Ile Met Ser His Lys
 115 120 125
 Ser Gly Thr Val Gly Ser His Tyr Asn Leu Leu Cys His Arg Asp Ser
 130 135 140
 Ile Phe Leu Ile Ser Asn His Val Ser

145

150

<210> 136

<211> 118

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 136

Phe	Asn	Cys	Ser	Trp	Ser	Leu	Thr	Ser	Pro	Gly	Xaa	Arg	Asp	Val	Leu
1				5					10					15	

Lys	Gly	Ser	Gln	Leu	Trp	Gln	Val	Thr	Asp	Ser	Trp	Glu	Met	Glu	Arg
			20					25					30		

Thr	Lys	Glu	Tyr	Ser	Ser	Cys	Leu	Thr	Phe	Leu	Pro	Thr	Ala	Asp	Ile
		35					40					45			

Val	Gln	Ala	Arg	Val	Met	Glu	Glu	Leu	Asn	Leu	Leu	Ala	Ser	Gln	Ala
	50				55					60					

Ala	Pro	Ile	Pro	Thr	Ser	Gln	Cys	Thr	Ala	Pro	Pro	His	Leu	Phe	Ser
65				70					75					80	

Pro	Leu	Ser	Leu	Thr	Ser	Pro	Phe	Ile	Met	Ser	His	Lys	Ser	Gly	Thr
			85					90					95		

Val	Gly	Ser	His	Tyr	Asn	Leu	Leu	Cys	His	Arg	Asp	Ser	Ile	Phe	Leu
			100				105						110		

Ile	Ser	Asn	His	Val	Ser
					115

<210> 137

<211> 337

<212> PRT

<213> Homo sapiens

<400> 137

Arg	Thr	Asn	Leu	Lys	Glu	Ala	Ser	Asp	Ile	Lys	Leu	Glu	Pro	Asn	Thr
1				5					10					15	

Leu	Asn	Gly	Tyr	Lys	Ser	Ser	Val	Thr	Glu	Pro	Cys	Pro	Asp	Ser	Gly
			20					25				30			

Glu	Gln	Leu	Gln	Pro	Ala	Pro	Val	Leu	Gln	Glu	Glu	Glu	Leu	Ala	His
		35					40					45			

Glu	Thr	Ala	Gln	Lys	Gly	Glu	Ala	Lys	Cys	His	Lys	Ser	Asp	Thr	Gly
	50				55					60					

Met	Ser	Lys	Lys	Lys	Arg	Gln	Gly	Lys	Leu	Val	Lys	Gln	Phe	Ala	Lys
65				70					75					80	

Ile	Glu	Glu	Ser	Thr	Pro	Val	His	Asp	Ser	Pro	Gly	Lys	Asp	Asp	Ala
			85					90					95		

Val	Pro	Asp	Leu	Met	Gly	Pro	His	Ser	Asp	Gln	Gly	Glu	His	Ser	Gly
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

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100              105              110
Thr Val Gly Val Pro Val Ser Tyr Thr Asp Cys Ala Pro Ser Pro Val
115              120              125

Gly Cys Ser Val Val Thr Ser Asp Ser Phe Thr Lys Asp Ser Phe Arg
130              135              140

Thr Ala Lys Ser Lys Lys Lys Arg Arg Ile Thr Arg Tyr Asp Ala Gln
145              150              155

Leu Ile Leu Glu Asn Asn Ser Gly Ile Pro Lys Leu Thr Leu Arg Arg
165              170              175

Arg His Asp Ser Ser Ser Lys Thr Asn Asp Gln Glu Asn Asp Gly Met
180              185              190

Asn Ser Ser Lys Ile Ser Ile Lys Leu Ser Lys Asp His Asp Asn Asn
195              200              205

Asn Leu Tyr Val Ala Lys Leu Asn Asn Gly Phe Asn Ser Gly Ser Gly
210              215              220

Ser Ser Ser Thr Lys Leu Lys Ile Gln Leu Lys Arg Asp Glu Glu Asn
225              230              235

Arg Gly Ser Tyr Thr Glu Gly Leu His Glu Asn Gly Val Cys Cys Ser
245              250              255

Asp Pro Leu Ser Leu Leu Glu Ser Arg Met Glu Val Asp Asp Tyr Ser
260              265              270

Gln Tyr Glu Glu Ser Thr Asp Asp Ser Ser Ser Ser Glu Gly Asp Glu
275              280              285

Glu Glu Asp Asp Tyr Asp Asp Asp Phe Glu Asp Asp Phe Ile Pro Leu
290              295              300

Pro Pro Ala Lys Arg Leu Arg Leu Ile Val Gly Lys Asp Ser Ile Asp
305              310              315

Ile Asp Ile Ser Ser Arg Arg Arg Glu Asp Gln Ser Leu Arg Leu Asn
325              330              335

Ala

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<210> 138
<211> 26
<212> PRT
<213> Homo sapiens

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<400> 138
Glu Ala Ala Val Ser Lys Pro Ala Gly Asn Trp Asp Val Ala Gly Asp
1          5          10          15

Glu Arg Thr Asp Pro Ser Val Leu Pro Ala
20          25

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<210> 139
<211> 478
<212> PRT

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<213> Homo sapiens

<400> 139

Ala	Phe	Ala	Lys	Ser	Tyr	Leu	Gly	Asp	Thr	Ile	Glu	Gly	Thr	Pro	Ala
1				5					10					15	
Gly	Thr	Gly	Pro	Glu	Phe	Pro	Gly	Arg	Pro	Thr	Arg	Pro	Met	Gln	Phe
			20					25					30		
Ala	Trp	Gln	Ser	Tyr	Lys	Arg	Tyr	Ala	Met	Gly	Lys	Asn	Glu	Leu	Arg
		35					40					45			
Pro	Leu	Thr	Lys	Asp	Gly	Tyr	Glu	Gly	Asn	Met	Phe	Gly	Gly	Leu	Ser
	50					55					60				
Gly	Ala	Thr	Val	Ile	Asp	Ser	Leu	Asp	Thr	Leu	Tyr	Leu	Met	Glu	Leu
	65				70					75					80
Lys	Glu	Glu	Phe	Gln	Glu	Ala	Lys	Ala	Trp	Val	Gly	Glu	Ser	Phe	His
				85					90					95	
Leu	Asn	Val	Ser	Gly	Glu	Ala	Ser	Leu	Phe	Glu	Val	Asn	Ile	Arg	Tyr
			100					105					110		
Ile	Gly	Gly	Leu	Leu	Ser	Ala	Phe	Tyr	Leu	Thr	Gly	Glu	Glu	Val	Phe
		115					120					125			
Arg	Ile	Lys	Ala	Ile	Arg	Leu	Gly	Glu	Lys	Leu	Leu	Pro	Ala	Phe	Asn
	130					135						140			
Thr	Pro	Thr	Gly	Ile	Pro	Lys	Gly	Val	Val	Ser	Phe	Lys	Ser	Gly	Asn
	145				150					155					160
Trp	Gly	Trp	Ala	Thr	Ala	Gly	Ser	Ser	Ser	Ile	Leu	Ala	Glu	Phe	Gly
			165						170					175	
Ser	Leu	His	Leu	Glu	Phe	Leu	His	Leu	Thr	Glu	Leu	Ser	Gly	Asn	Gln
			180					185					190		
Val	Phe	Ala	Glu	Lys	Val	Arg	Asn	Ile	Arg	Lys	Val	Leu	Arg	Lys	Ile
		195					200					205			
Glu	Lys	Pro	Phe	Gly	Leu	Tyr	Pro	Asn	Phe	Leu	Ser	Pro	Val	Ser	Gly
		210				215					220				
Asn	Trp	Val	Gln	His	His	Val	Ser	Val	Gly	Gly	Leu	Gly	Asp	Ser	Phe
		225			230					235					240
Tyr	Glu	Tyr	Leu	Ile	Lys	Ser	Trp	Leu	Met	Ser	Gly	Lys	Thr	Asp	Met
			245						250					255	
Glu	Ala	Lys	Asn	Met	Tyr	Tyr	Glu	Ala	Leu	Glu	Ala	Ile	Glu	Thr	Tyr
			260					265					270		
Leu	Leu	Asn	Val	Ser	Pro	Gly	Gly	Leu	Thr	Tyr	Ile	Ala	Glu	Trp	Arg
			275				280					285			
Gly	Gly	Ile	Leu	Asp	His	Lys	Met	Gly	His	Leu	Ala	Cys	Phe	Ser	Gly
		290				295					300				
Gly	Met	Ile	Ala	Leu	Gly	Ala	Glu	Asp	Ala	Lys	Glu	Glu	Lys	Arg	Ala
	305				310					315					320
His	Tyr	Arg	Glu	Leu	Ala	Ala	Gln	Ile	Thr	Lys	Thr	Cys	His	Glu	Ser
			325						330					335	

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Tyr Ala Arg Ser Asp Thr Lys Leu Gly Pro Glu Ala Phe Trp Phe Asn
      340      345      350
Ser Gly Arg Glu Ala Val Ala Thr Gln Leu Ser Glu Ser Tyr Tyr Ile
      355      360      365
Leu Arg Pro Glu Val Val Glu Ser Tyr Met Tyr Leu Trp Arg Gln Thr
      370      375      380
His Asn Pro Ile Tyr Arg Glu Trp Gly Trp Glu Val Val Leu Ala Leu
      385      390      395
Glu Lys Tyr Cys Arg Thr Glu Ala Gly Phe Ser Gly Ile Gln Asp Val
      405      410      415
Tyr Ser Ser Thr Pro Asn His Asp Asn Lys Gln Gln Ser Phe Phe Leu
      420      425      430
Ala Glu Thr Leu Lys Tyr Leu Tyr Leu Leu Phe Ser Glu Asp Asp Leu
      435      440      445
Leu Ser Leu Glu Asp Trp Val Phe Asn Thr Glu Ala His Pro Leu Pro
      450      455      460
Val Asn His Ser Asp Ser Ser Gly Arg Ala Trp Gly Arg His
      465      470      475

<210> 140
<211> 4
<212> PRT
<213> Homo sapiens

<400> 140
Asn Val Ser Gly
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<210> 141
<211> 4
<212> PRT
<213> Homo sapiens

<400> 141
Asn His Ser Asp
1

<210> 142
<211> 8
<212> PRT
<213> Homo sapiens

<400> 142
Gly Tyr Thr Asn Cys Gly Lys Thr
1          5

<210> 143
<211> 10
<212> PRT
<213> Homo sapiens

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<400> 143

Val Gly Tyr Thr Asn Cys Gly Lys Thr Thr
1 5 10

<210> 144

<211> 12

<212> PRT

<213> Homo sapiens

<400> 144

Val Val Gly Tyr Thr Asn Cys Gly Lys Thr Thr Leu
1 5 10

<210> 145

<211> 273

<212> PRT

<213> Homo sapiens

<400> 145

Arg His His Asp Arg Ser Pro Leu Ser Asp Pro Leu Leu Pro Glu Thr
1 5 10 15Leu Leu Ala Pro Pro Asp Pro Pro Gly Leu Trp Pro Ala Ala Pro Leu
20 25 30Ser Leu Arg Arg Gly Ser Ala Val Thr His Gln Arg Ala Ser Gly
35 40 45Arg Gly Trp Gly Gly Gly Ala Gly Met Ser Leu Pro Leu Arg Ala Pro
50 55 60Ala Pro Arg Leu Glu Arg Arg Pro Ala Gly Pro Ala Asp Val Phe
65 70 75 80Leu Val Pro Lys Arg Val Val Arg Ala Ser Arg Pro Leu Arg Asp Leu
85 90 95Arg Ala Ser His Arg Ala Pro Arg Thr Gln Arg Ala Trp Ser Ser Pro
100 105 110Leu Thr Pro Ser Pro Ala Gly Thr His Ala Gly Ser Thr His Ser Ala
115 120 125Pro Pro Pro Asn Phe Trp Glu Arg Thr Pro Gly Ser Ala Gln Pro Leu
130 135 140Ala Phe Gln Lys Pro Leu Tyr Ala Tyr Leu Ile Phe Val Ile Gly Asp
145 150 155 160Glu Pro Ser Leu Leu Ser Pro Phe Pro His Thr His Gln Ser Pro Leu
165 170 175Ala Ile Pro Ser Pro Ser Ala Ser Pro Pro Ser Cys Ala Pro Ala
180 185 190Pro His Ser Pro Pro Pro Ile Gly Leu Ala Leu Ala Cys Lys Ser Arg
195 200 205Arg Trp Pro Arg Ala Gln Pro Ser Arg Met Ser Pro Gly Pro Pro Leu
210 215 220

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Trp Glu Arg Arg Gln Ser Tyr Trp Pro Leu Thr Arg Pro Leu Gly Pro
225          230          235          240
Arg Ala Arg Gln Ala Phe Glu Ser Thr Cys Ser Ser Pro Glu Ser Arg
          245          250          255
Pro Arg Pro Cys Leu Pro His Arg Arg Pro Gln Ser Thr Leu Pro Gln
          260          265          270
Leu

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<210> 146
<211> 52
<212> PRT
<213> Homo sapiens

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<400> 146
Ala Leu Trp Ala Gly Ala Gly Gly Phe Glu Gly Leu Ser Ser Thr Arg
1          5          10          15
Ala Gln Arg Ser Cys Gln Trp Pro Val Ala Leu Pro Pro Phe Pro Glu
          20          25          30
Arg Gly Ser Arg Gly His Pro Gly Arg Leu Gly Pro Gly Pro Pro Ser
          35          40          45
Ala Leu Ala Ser
          50

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<210> 147
<211> 51
<212> PRT
<213> Homo sapiens

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<400> 147
Lys Gly Ile Met Leu Cys Trp Phe Cys Phe Phe Val Leu Leu Phe Phe
1          5          10          15
Phe Phe Phe Leu Phe Cys Phe Leu Val Met Trp Leu Lys Cys Asn Ser
          20          25          30
Phe Phe Phe Gly Thr Tyr Phe Cys Gln Leu Lys Thr Arg Arg Ala Gln
          35          40          45
Leu Phe Phe
          50

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<210> 148
<211> 59
<212> PRT
<213> Homo sapiens

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<400> 148
Met Lys Thr Gly Gly Lys His Ser Val Ile Arg Tyr Phe Ser Asn Ile
1          5          10          15
Lys Thr Thr Lys Thr Asn Asp Lys Asn Val Tyr Phe Tyr Thr Pro Ala
          20          25          30

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Tyr Arg Val Ser Phe Arg Val Tyr Glu Tyr Leu Asn Leu Leu Ile Ser
 35 40 45

Val Leu Met Lys Ala Glu Leu Asn Arg Glu Ser
 50 55

<210> 149

<211> 60

<212> PRT

<213> Homo sapiens

<400> 149

Pro Gly Lys Pro Lys Ser Ala His Phe Pro Pro Cys Cys Met Phe Ser
 1 5 10 15

Val Leu Cys Leu Cys Val Cys Ala Arg Gln Arg Asp Arg Leu Phe Val
 20 25 30

Lys Ser Ala Ser Cys Leu Gly Ile Phe Val Ser His Leu Ala Val Ser
 35 40 45

Ser Arg Thr Ile Gln Leu Ala Phe Gln Ala Trp Arg
 50 55 60

<210> 150

<211> 39

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 150

Trp Met Ser Glu Tyr Xaa Gln Trp Val Phe Leu Ile Ser Leu Arg Ile
 1 5 10 15

Cys Leu Arg Val His Tyr Gln Gly Ser Gly Thr Arg Xaa His Ser Leu
 20 25 30

His Gln Phe Leu Arg Val Leu
 35

<210> 151

<211> 37

<212> PRT

<213> Homo sapiens

<400> 151

Arg Lys Lys Lys Ile Cys Glu Leu Tyr Ala Lys Val Leu Gly Ser Gln
 1 5 10 15

Glu Ala Leu His Pro His Tyr Glu Glu Lys Asn Trp Cys Glu Glu Gln
 20 25 30

Tyr Ser Gly Gly Cys
35

<210> 152

<211> 33

<212> PRT

<213> Homo sapiens

<400> 152

Cys Glu Leu Tyr Ala Lys Val Leu Gly Ser Gln Glu Ala Leu His Pro
1 5 10 15

His Tyr Glu Glu Lys Asn Trp Cys Glu Glu Gln Tyr Ser Gly Gly Cys
20 25 30

Tyr

<210> 153

<211> 25

<212> PRT

<213> Homo sapiens

<400> 153

Cys Glu Leu Tyr Ala Lys Val Leu Gly Ser Gln Glu Ala Leu His Pro
1 5 10 15

Val His Tyr Glu Glu Lys Asn Trp Cys
20 25

<210> 154

<211> 109

<212> PRT

<213> Homo sapiens

<400> 154

Gln Leu Leu Leu Leu Pro Pro Lys Ala Pro Arg Asn Pro Phe Leu Pro
1 5 10 15

Cys Pro Gly Ser Arg Thr Pro Gly Tyr Ile Trp Lys Val Glu Met Trp
20 25 30

Gly Ser Cys Val Leu Glu Tyr Tyr Val Ser Pro Pro Ser Ala Val Phe
35 40 45

Ser Glu His Val Cys Cys Pro Trp Trp Glu Arg Gly His Cys Ala Val
50 55 60

Val His Arg Cys Leu Ser Phe Thr Val Gly Leu Ser Val Cys Leu Ser
65 70 75 80

Phe Leu Ser Ala Ala Gln Met Glu Asn Asn Tyr Leu Leu His Trp Arg
85 90 95

Glu Arg Lys Ser Leu Arg Ile Pro Lys Gly Thr Leu Ala
100 105

<210> 155

<211> 44

<212> PRT

<213> Homo sapiens

<400> 155

Asp Glu Val Ser Ser Lys Glu Gly Ser Met Cys Pro Ser Ser Leu His
 1 5 10 15

Leu Ala Ala Gly Ile Val Asp Ile Thr Gly Ala Leu Ala Ala Val Ser
 20 25 30

Arg Gly Ser Lys Pro His Pro Lys Ser Lys Ala Asp
 35 40

<210> 156

<211> 186

<212> PRT

<213> Homo sapiens

<400> 156

Gly Gln Arg Gln Ala Leu Cys Pro Gln Leu Ile Leu Glu Ala Ser Arg
 1 5 10 15

Leu Cys Glu Val Ser Thr Ser Gln His Leu Cys Ser Ser Phe Glu Ala
 20 25 30

Ser Asn Cys Leu Gly Lys Arg Asp Arg Glu Met Glu Ala Trp Ile Arg
 35 40 45

Ala Asn Gln Pro Ala Phe Leu Val Trp Arg Ser Thr Trp Pro Phe Pro
 50 55 60

Trp Ala Gln Gly His Leu Lys His Cys Pro Val Lys Leu Val Leu Gly
 65 70 75 80

Cys Pro Cys Ala Trp Arg Val Leu Lys Leu Thr Phe Gln Ile Pro Arg
 85 90 95

Glu Gln Gly Glu Ile Ser Arg Met Ser Ile Ala Ala Lys Lys Cys Leu
 100 105 110

Gly Gly Leu Pro Leu Leu Thr Pro His Leu Ala Ala Asp Gln His Ser
 115 120 125

Ile Leu Asn Thr Leu Arg Ala Pro Ser Met Ala Phe Asp Arg Thr Lys
 130 135 140

Ser Pro Gly Val Val Thr Glu Asn Arg Ser Cys Ala Val Thr Ala Met
 145 150 155 160

Phe Pro Pro Gly Arg Gln Lys Leu Lys Ser Pro Lys Arg Thr Ser Phe
 165 170 175

Ser Ser Ala Ala Asp Glu Trp His Arg Tyr
 180 185

<210> 157

<211> 102

<212> PRT

<213> Homo sapiens

<400> 157

Val Ala Ser Ile Leu Lys Ala Ala Pro Asn Arg Gln Ile Leu Pro Leu
1 5 10 15

Phe Leu Lys His His His Val Gly Glu Pro Ser Glu Gly Trp Ala Thr
20 25 30

Ser Gln Asp Ser Leu Leu Gly Gly Leu Gly Tyr Leu Gly Val Leu Pro
35 40 45

His Asn Val Gln Gly Asp Ile Val Thr Lys Leu Lys Arg Leu Cys Cys
50 55 60

Phe Ser Val Met Ser Ala Gly Ile Lys Ala Val Ser Ala Pro Cys Gly
65 70 75 80

Ala Ser Cys Gly Ile Cys Ser Ser Pro Tyr Pro His Asn Ser Gly Ala
85 90 95

Gln Gly Pro Gly Leu Val
100